

SmartPlant License Manager

Installation and User's Guide

Process, Power & Marine



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Introduction to SmartPlant License Manager

Intergraph® SmartPlant License Manager (SPLM) allows you to accurately track how many users are concurrently accessing plant design software. It also helps you comply with your Software Licensing Agreement. Intergraph recommends you install SmartPlant License Manager prior to any of the software it licenses.

SmartPlant License Manager is client/server-based software. One or more central servers can be used to maintain licensing information for all plant design software on a network. The licensing information can be on a single server, but the licenses float so any computer on the network can use them. Both the client computer and the license server must have SmartPlant License Manager installed. Because licensing has little impact on computer performance, any computer on your domain with a fixed TCP/IP address can be a license server.

SmartPlant License Manager supports the following products and license types:

FrameWorks® Plus

ISOGEN (Batch ISOGEN and Interactive ISOGEN)

Pelican Forge SupportModeler™ and SupportManager™

PDS®: PDS 3D, PDS 2D, PDS IDM, PDS PID

SDNF Import

SmartPlant Electrical

SmartPlant® Instrumentation (formerly INtools®)

SmartPlant P&ID

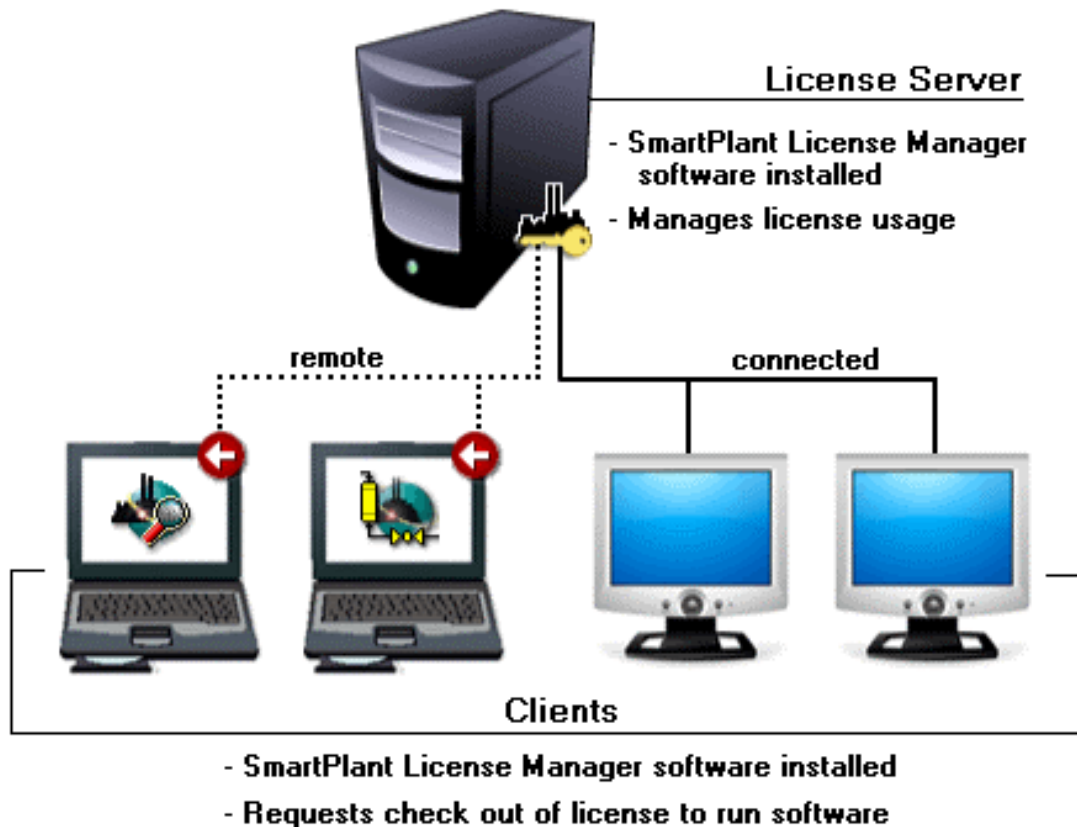
SmartPlant Review

SmartSketch®

Notes

- Some SmartSketch installations do not require licensing. SmartPlant Review Publisher does not require SmartPlant License Manager licensing.
- This guide includes the INtools licensing information and request forms. SmartPlant Instrumentation (formerly INtools 7.0 and above) utilizes the current SmartPlant License Manager request forms. INtools (6.0 and below) customers should continue to use the internal licensing software.

Refer to Frequently Asked Questions (FAQ) (page 43) for answers to licensing setup and configuration questions.



Intergraph software is purchased or leased by the license. For example, if you purchased 30 licenses, you are licensed for 30 processes to concurrently access the various software applications. SmartPlant License Manager keeps a running inventory of how many licenses are in use and how many are available for use.

When an application is started, the application sends a request to one or more SmartPlant License Manager license servers to obtain a license to run the software. If a license of the requested type is available, the server grants the license and the application starts. If all licenses of the requested type are in use when you begin an interactive session, the software does not start. If all licenses are in use when a batch job requests a license, the batch job waits until a license is released when a user logs out or another batch job completes.

The Print option on the SmartPlant License Manager Information dialog box saves displayed output to a file and/or prints the output to a selected printer.

What's New in This Guide

- SmartPlant License Manager is delivered on a separate CD. Intergraph recommends installing SmartPlant License Manager prior to any of the software that requires a license. For more information, refer to Installing SmartPlant Licensing Manager on page 17.
- The product name has changed from Plant Design Licensing to SmartPlant License Manager.
- To view the latest updates about software compatibility when using SmartPlant License Manager, refer to Requesting a Software Upgrade: SmartPlant License Manager Version Compatibility, on page 14.
- To view the most common SmartPlant License Manager installation and usage questions, refer to Frequently Asked Questions (FAQ), on page 43
- For information about using eLicense, refer to Using eLicense to Generate SmartPlant License Manager Keys on page 79.
- The **SmartPlant License Checkout** utility (License Checkout Utility.exe) allows you to obtain licenses for SmartPlant Review and its modules for use on a non-networked computer. Using this utility allows you to run SmartPlant Review and its modules without a network connection to the license server. This utility is delivered with the SmartPlant Review software. For more information, refer to Using the SmartPlant License Checkout Utility with SmartPlant Review on page 75.
- The new **Generate Machine ID** command allows you to generate a machine identifier. The machine identifier created by this command is sent to Intergraph and then a key will be sent to you. This command must be run on the license server and is to be run by the system administrator. For more information, refer to Requesting a License Key for the License Server on page 14.
- The new **Log Product Usage** command allows you to create a report of detailed use of the licenses. The log created using this command helps you to monitor which groups use the product. The Output file name must be specified along with the directory for the software to start logging. For more information, refer to Logging Product Usage on page 32.
- A Help menu now displays on the main SmartPlant License Manager window. Help and About SmartPlant License Manager commands are available on the Help menu.

- There is a new eCustomer Web page location: <https://crmweb.intergraph.com>. Before installing or upgrading your software, please check this Web site for the latest software and documentation versions.

Terms

License Key – An alphanumeric code entered on a license server that activates a license. The encrypted code tells the license server how many licenses and type(s) that have been leased or purchased and, therefore, how many it can issue. A key can be up to 408 characters in length.

License – A contractual right to run a copy of the software. A license key activates a license.

Remote License Mode / Checkout – Running SmartPlant Review without a network connection to the license server. You must install and run the SmartPlant License Checkout Utility to use this mode. For more information, refer to Appendix A of this document or refer to the *SmartPlant License Checkout Utility User's Guide* delivered with SmartPlant Review.

Site LAN – The Local Area Network (LAN) at a physical site that is associated with a site license server.

Site – The fixed geographic area surrounding the site license server.

Site License Server – The computer where the key is loaded. The key contains a code that tells the license server how many licenses of each type it can issue. The license server can be a server or a standard computer.

Setup Options

There are several options for setting up SmartPlant License Manager license servers and clients.

Single Site LAN and License Server – You can assign all licenses at your site to a single server for the purpose of license administration. This greatly simplifies the license administration process.

A single license server can be used to administer LANs within a 5-mile radius (assuming that adequate network bandwidth is available). A different license server must administer LANs outside the 5-mile radius.

License Servers on each LAN – You can set up your system so that each LAN at your site has its own license server.

Multiple License Servers on one LAN – You can have part of your licenses reside on one license server and the rest on another license server. Computers can be set up to retrieve licenses from a secondary server if all licenses on the primary server are in use.

SmartPlant Checkout License Utility – You can obtain licenses for SmartPlant Review for use on a non-networked computer (for example, a laptop). Using this utility allows you to run SmartPlant Review remotely without a network connection to the license server. This utility is available as part of the SmartPlant Review product and is not included in SmartPlant License Manager. SmartPlant License Manager supports this utility according to a setting in the SmartPlant Checkout License Utility. When the product requests a license to be checked out, you will be able to see the reserved license in the display report and in the log report (if logging is enabled).

Licensing Example

In connected license mode, a SmartPlant License Manager site license server is configured to manage the SmartPlant License Manager licenses.

For example, XYZ Engineering Ltd. purchases one license key that contains four SmartPlant Review core licenses and three licenses of each of the seven modules.

To manage these licenses, the site administrator configures a networked workstation or server to be the SmartPlant License Manager license server, then installs and configures both SmartPlant Review and SmartPlant License Manager on the workstations within the company.

When a user starts SmartPlant Review on an individual workstation, one license for the core SPR product and one license for each installed module is automatically obtained from the SmartPlant License Manager license server. This means that if this particular workstation has all seven modules installed, then eight (one core and seven module) licenses are used by this workstation. When the SmartPlant Review session ends, the licenses are automatically returned on the SmartPlant License Manager license server. Those licenses are now available for use by another SmartPlant Review session.

To continue this example, up to three SmartPlant Review sessions using seven modules each can be running concurrently. A fourth SmartPlant Review session can also run concurrently since there is one remaining core SPR license; however, this fourth session cannot run any modules because all of the module licenses are in use. If this fourth SPR session has modules installed, SmartPlant Review attempts to find licenses for the installed modules then displays a "no licenses available" message and closes the session. To run this fourth session without attempting to obtain licenses for the installed modules, use the SmartPlant Review Select Modules Utility to specify which installed modules you want to obtain licenses for.

Refer to *Frequently Asked Questions (FAQ)* on page 43 for answers to licensing setup and configuration questions.

Quick Installation Workflow

Use this workflow for all products that require SmartPlant License Manager concurrent licensing.

The System Administrator will complete or give guidance about most of these steps. Administrator rights are required to install and setup SmartPlant License Manager. Users who need more information should follow the detailed procedures in the other sections. For more information, refer to the following sections: *Frequently Asked Questions (FAQ)*, *Administrative Tasks*, and *Troubleshooting and Error Messages*.

Note

- Be sure that the license server has a static IP address before generating the Machine ID, and the network adapter needs to be the primary connection. If it is not possible to define a static IP address in the local network adapter, you can create a virtual network adapter by installing Microsoft Loopback Adapter. Refer to *Installing SmartPlant License Manager on a Standalone System* on page 56.
1. **Designate machine as SmartPlant License Manager license server:** This machine must be on the network and have a name with no spaces.
 2. **Generate a Machine ID.** For more information, refer to *Requesting a License Key for the License Server* on page 14.
 3. **Upgrade software:** Submit a request if you need an upgrade.
 4. **Request license key:** *Request a server license key.*
 5. **Install SmartPlant License Manager on license server:** Install SmartPlant License Manager and the license key on the server.
 - a. Install SmartPlant License Manager.
 - b. Click **Start > Programs > Intergraph SmartPlant License Manager > SmartPlant License Manager**.
 - c. Select **Install and Remove**.
 - d. Click **Select**.
 - e. Select **Install License Key**.
 - f. Click **Select**.
 - g. Click **Server** and enter the license key you received. Exit SmartPlant License Manager.
 6. **Install SmartPlant Licensing Manager on client:** Install SmartPlant Licensing Manager on each client machine. Run SmartPlant License Manager, specifying the name of the SmartPlant License Manager license server.
 - a. Install SmartPlant License Manager.

- b. Click **Start > Programs > Intergraph SmartPlant License Manager > SmartPlant License Manager**.
 - c. Click **Configure and Test** and **Select License Server for Client**.
 - d. Enter the SmartPlant License Manager Server name or the TCP/IP address.
Exit SmartPlant License Manager.
- 7. **Install the software that requires licensing:** (Such as SmartPlant Review, PDS or SmartPlant P&ID) Use that product's installation and configuration guides.
- 8. **Test communication:** Use the **Test Seat Reservation** and **Test Seat Release** commands to ensure that communication is set up between the license server and client. Successful messages show appropriate communication.
 - a. Click **Test Seat Reservation**. Select the server name and **Batch** or **Interactive** mode. Note the seat number in the SmartPlant License Manager Information dialog box.
 - b. Click **Test Seat Release** and enter the seat designated in Step 8a.
- 9. **Run software:** Start the software product that requires SmartPlant License Manager licensing.

Requesting Licenses and Installing SmartPlant License Manager

This section provides detailed information about requesting and installing upgrades and license keys.

Requesting Software Upgrades and License Keys

The SmartPlant License Manager License Request form does not issue an upgrade of the product that requires licensing. An upgrade is not required unless it is needed for work or production purposes.

 Note

- Before upgrading your software, please check <http://crmweb.intergraph.com> for the latest software and documentation versions. The latest information about SmartPlant License Manager is always available at this site.

Requesting a Software Upgrade: SmartPlant License Manager Version Compatibility

For the most current compatibility matrix, please refer to the eCustomer Web site (<http://crmweb.intergraph.com>).

Requesting a License Key for the License Server

SmartPlant License Manager uses the **Generate Machine ID** command to uniquely identify the machine (license server) where the license will be installed. You must generate a Machine ID on the license server and send the resulting code to Intergraph before you can obtain a new or updated license key. When you run **Start > Programs > Intergraph SmartPlant License Manager > Generate Machine ID**, a file is created that contains the code needed to send to Intergraph.

The following describes installing SmartPlant License Manager or upgrading your current installation of Plant Design Licensing (PD_LICE) software. Before upgrading your software, please check <http://crmweb.intergraph.com> for the latest software and documentation. The latest information about SmartPlant License Manager is always available at this site.

Note

- Be sure that the license server has a static IP address before generating the Machine ID, and the network adapter needs to be the primary connection. If it is not possible to define a static IP address in the local network adapter, you can create a virtual network adapter by installing Microsoft Loopback Adapter. Refer to *Installing SmartPlant License Manager on a Standalone System* on page 56.

If the license server does not contain PD_Lice or SmartPlant License Manager

1. Install SmartPlant License Manager using the Installation CD or download the SmartPlant License Manager product from the eCustomer Web site (<http://crmweb.intergraph.com>).
2. On your designated license server, click **Start > Programs > Intergraph SmartPlant License Manager > Generate Machine ID**.
3. Select **Browse**  on the **Generate Machine ID** dialog box and define a path and file name for the Machine ID. For example, *c:\temp\machine_id.txt*. The created file will be a text file.

Note

- When entering a path name in one of the SmartPlant License Manager dialog boxes, spaces are allowed in the name. If you enter a path

name in a Command Window on a command line, you must use double-quotes around the path name.

If the license server is currently running as a PD_Lice server

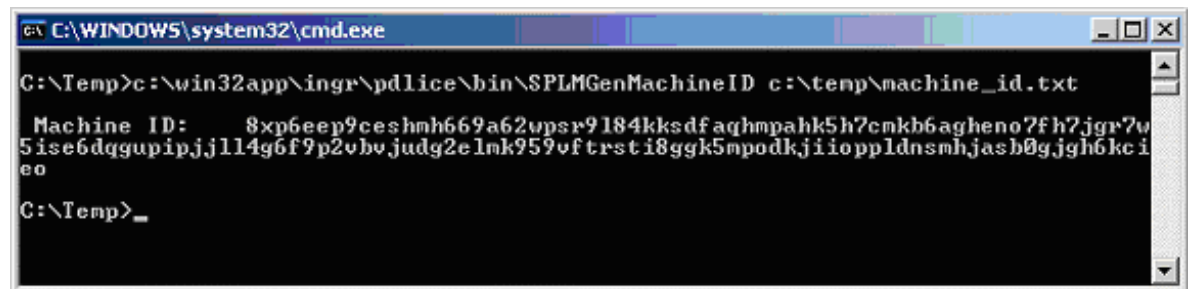
If PD_Lice is already installed on your license server, you must remove the software before you can install SmartPlant License Manager.

1. To remove the PD_LICE product, click **Start > Programs > PD_LICE > Remove**.
2. When PD_LICE is successfully removed, you can install SmartPlant License Manager as previously described and then generate your Machine ID.

Generating a Machine ID before installing SmartPlant License Manager when PD_LICE is already installed and in use

If you do not want your license server unavailable for processing licenses while you generate a Machine ID and install the SmartPlant License Manager software, you can install the Generate Machine ID executable in the existing \pdlice directory.

1. Download the Generate Machine ID executable from the eCustomer web site (<http://crmweb.intergraph.com/>).
2. Copy the SPLMGenMachineID.exe file to your \PDLICE\bin directory.
3. Open a Command Window and run the executable from the command line with the output file included as an argument. For example, from the command line enter `c:\win32app\ingr\pdlice\bin\SPLMGenMachineID c:\temp\machine_id.txt`. If the output file contains blanks, either in the path or the filename, you must place double-quote marks (“”) at the beginning and the end of the output file content. For example, `C:\win32app\ingr\pdlice\bin\SPLMGenMachineID “c:\temp\machine id.txt”`.



```
C:\WINDOWS\system32\cmd.exe

C:\Temp>c:\win32app\ingr\pdlice\bin\SPLMGenMachineID c:\temp\machine_id.txt

Machine ID: 8xp6eep9ceshnh669a62vpsr9184kksdfaghpahk5h7cmkb6aghen0?fh7jgr?u
5ise6dggupipj114g6f9p2vbojudg2elmk959vftst18ggk5mpodkjiioopp1dnsmhjash0gjh6kci
eo

C:\Temp>_
```

Requesting a License Key

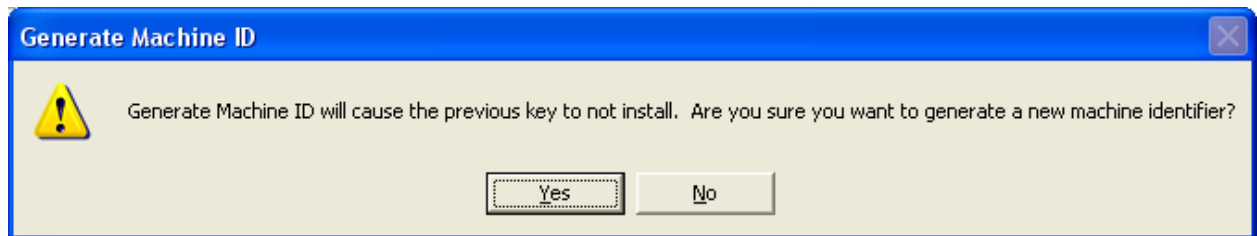
After generating the Machine ID for the license server, send the text file and the completed License Key Request form in an e-mail to Intergraph using this address: ppmserv@intergraph.com. See *Request for SmartPlant License Manager (SPLM)*

Key on page 65 for the License Key Request form. An Intergraph Software Delivery representative will e-mail your key to you within 48 hours of receipt of your request.

Customers using eLicense to manage their licenses receive them immediately by e-mail. Other customers receive their licenses within 2 business days. The eLicense Web site is: <https://ppmapps.intergraph.com/ELICENSE/>. For more information, refer to *Using eLicense to Generate SmartPlant License Manager Keys* on page 79.

You can also call Intergraph Process, Power & Marine (PPM) Support. In the United States, call 1-800-766-7701 for the Global Order Desk. (Follow Support and Sales phone links.) International customers can contact their local Intergraph office.

If you re-run the **Generate Machine ID** command, it will invalidate the existing Machine ID. The following warning displays when you re-run the **Generate Machine ID** command. Note that this warning message displays when you use the command from the Start menu but not from the Command Prompt (when entering splmGenMachineID.exe).



If you have already sent the Machine ID in an e-mail to Intergraph but not yet received your license key, select **No** to not generate a new Machine ID. Otherwise, the key you receive from Intergraph will not install.

If you generate a new Machine ID after installing the license key, the license server will continue to work. However, you will have to submit this new Machine ID to Intergraph when requesting a new or updated license key.

Note: If you remove SmartPlant License Manager after generating and sending the Machine ID to Intergraph, the new license key you receive will not install.

The number of licenses covered by a license key is the same as the total number of licenses that you purchased or leased for each LAN ID listed for that license server. Intergraph records are used to determine the correct number of licenses for the key.

In cases where the system will not be connected to a network, such as running a laptop, the SmartPlant License Manager license server and the client are the same machine.

Installing the Software that Requires Licensing

Intergraph recommends you install SmartPlant License Manager on every machine prior to installing any of the licensed products. During setup, products automatically search for SmartPlant License Manager on the machine. If it is not installed, a message box displays as shown in the following example. When you click **OK** on the message box, SmartPlant License Manager automatically installs.



Installing SmartPlant Licensing Manager

1. Insert the Intergraph SmartPlant License Manager CD. If the CD does not start automatically, double-click **Setup.exe** in the root folder of the CD.
2. Select **SmartPlant License Manager Installation**.
3. Click **Next** on the **Welcome to the InstallShield Wizard for SmartPlant License Manager** page.
4. Enter your name and company name in the **User Name** and **Company Name** fields on the **Customer Information** page. Click **Next**.
5. On the **Software License Agreement** page, select your country from the list and click **Display** to view the license agreement.

 Note

- The license agreement is delivered as a PDF file; consequently, you must have Acrobat Reader installed on the computer in order to view the license agreement. If the software detects that Acrobat Reader is not installed, an informational message box appears. To install Acrobat Reader and continue with the data installation, click **Yes**. If you click **No** on the message box, the setup process immediately stops without installing SmartPlant License Manager.
6. Carefully read the license agreement. Close the PDF document, and click **Yes** on the **License Agreement** page to accept the terms.

7. On the **Choose Destination Location** page, click **Next** to install SmartPlant License Manager in the default location. If you want to install the software in another location, click **Change** and select the new location.
8. Click **Install** on the **Ready to Install the Program** page. A status bar displays the progress of the installation on the **Status Setup** page.
9. Click **Finish** on the **InstallShield Wizard Complete** page to complete installation of SmartPlant License Manager.



Note

- Do not delete any files that are created during installation or as a result of using SmartPlant License Manager. Removal of any files causes the licensing system to fail and can require install, repair, or possibly removal and re-install of SmartPlant License Manager.

Installing Software from the Web

In addition to installing from CDs, some products can be installed from the Intergraph **eCustomer** Web site. This example uses SmartPlant Review, but all products are available on the Products List. Check to see if your product can be installed from the Web site.

1. Go to the **eCustomer** web site: <https://crmweb.intergraph.com>
2. Enter your user name and password.



Note

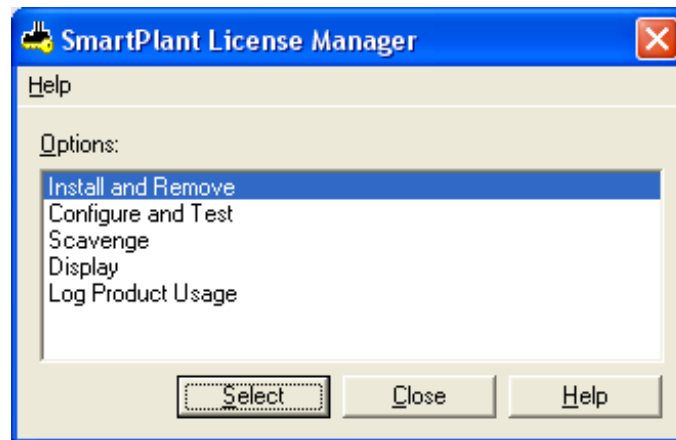
- If you are a new customer or do not have a user name and password, click the **I'm a New User** link to obtain your user name and password.
3. Click **Download Software Updates**.
 4. Click **Products**.
 5. Select the latest version of SmartPlant License Manager.
 6. Click **Save** to download the SmartPlant License Manager Zip file to your computer.
 7. Open the SmartPlant License Manager Zip file and double-click **setup.exe**.
 8. After the files are extracted to your computer, click **Continue** to install SmartPlant License Manager.
 9. Read the **Software License Agreement** carefully. If you agree to the specified terms, click **I Agree**.
 10. Specify the location where you want SmartPlant License Manager installed and click **Continue**.
 11. When the installation process is complete, click **OK**.
 12. Follow the instructions in the Running SmartPlant License Manager on page 20 to configure SmartPlant License Manager to work with SmartPlant Review.

Running SmartPlant License Manager

The **Start > Programs > Intergraph SmartPlant License Manager** menu contains the **Generate Machine ID** and **SmartPlant License Manager** icons.

1. Click **Start > Programs > Intergraph SmartPlant License Manager > SmartPlant License Manager** to begin using SmartPlant License Manager.

The main **SmartPlant License Manager** dialog box appears. Intergraph recommends reading the readme file for every release.



For more information, refer to . . .

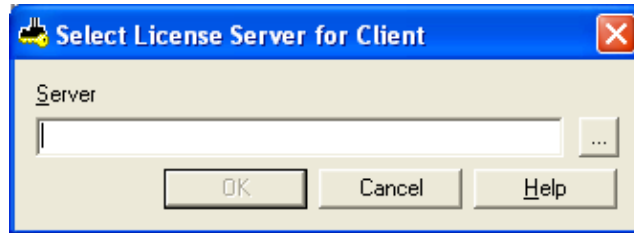
- *Troubleshooting and Error Messages*, page 54
- *Frequently Asked Questions (FAQ)*, page 43
- *Key-in Commands*, page 70
- *Managing License Usage / Returning Unused Licenses (Scavenging)*, page 39
- *Monitoring SmartPlant License Manager Licenses and Keys*, page 34
- *Requesting a License Key for the License Server*, page 14

Selecting a License Server for a Client

Use the following procedure to reserve a seat from the licensed server for a client computer.

1. Log onto each computer that will check out a license and be sure SmartPlant License Manager is installed.
2. On the Configuration and Testing dialog box, click **Select License Server For Client**. In a Command Prompt window, you can type `pdlice -j license_server`, where *license_server* is the name or TCP IP address of the license server.

The **Select License Server For Client** dialog box appears.



3. Type the computer name(s) of your license server in the **Server** field. The server name can be a maximum length of 29 characters. You cannot enter multiple server entries using this dialog box but you can enter multiple server entries from the Command Prompt.
4. Click **OK**. If you want to add another license server name, repeat step 2.
 - To verify that the computer correctly points to the license server, refer to *Displaying the License Server for a Client* on page 36.
 - To test checking out (reserving) a license on the client computer, refer to *Testing for Reserving a Seat* on page 29.
 - To release the license you just checked out, refer to *Testing for Seat*, page 31.

Installing a License Key on the License Server

After SmartPlant License Manager is installed and you have received your license key from Intergraph, you are ready to install the license key on the server. This installation must be done within 5 days of the specified installation date. This command requires administrator privileges on the license server.

 Note

You do not need to remove the existing license if you are using SmartPlant License Manager 8.0 or later. If you have already requested a new license by sending your Machine ID, you should not remove the existing key. Otherwise, the new key obtained from Intergraph will not install and you need to re-generate the machine ID and request another license key.

A license key is 26 to 252 alphanumeric characters, and looks like this example:

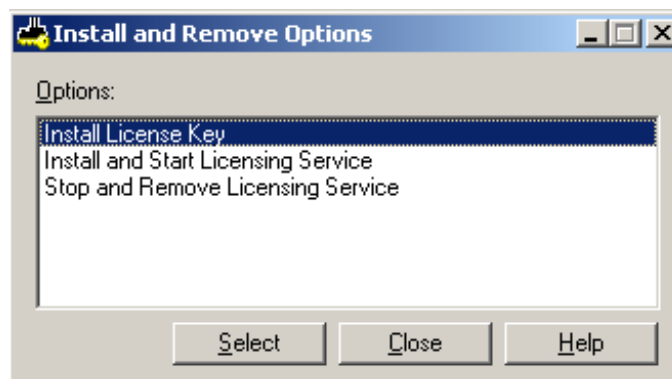
1ABCDEFGH58K7LAFDLH10G9FFQ

1. Click **Start > Programs > Intergraph SmartPlant License Manager > License** to start SmartPlant License Manager.

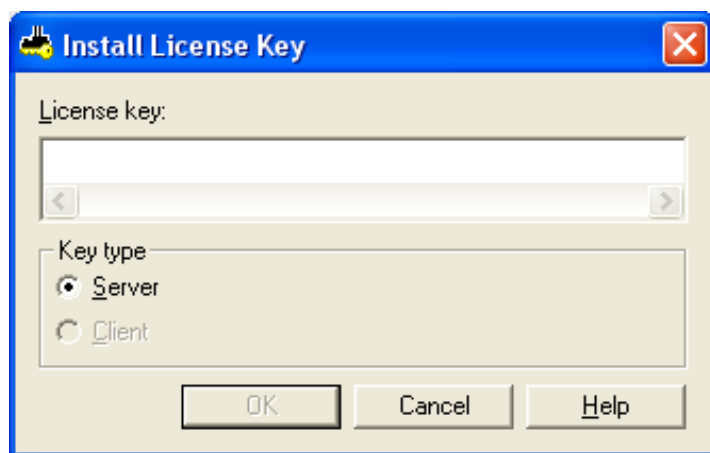
The SmartPlant Licensing Manager dialog box appears.

2. Click **Install and Remove Options** on the SmartPlant License Manager dialog box.

The **Install and Remove Options** dialog box appears.



3. Click **Install License Key**. The **Install License Key** dialog box appears. In a Command Prompt window, you can type `pdlice -a license_key`, where *license_key* is the series of alphanumeric characters that make up the license key.



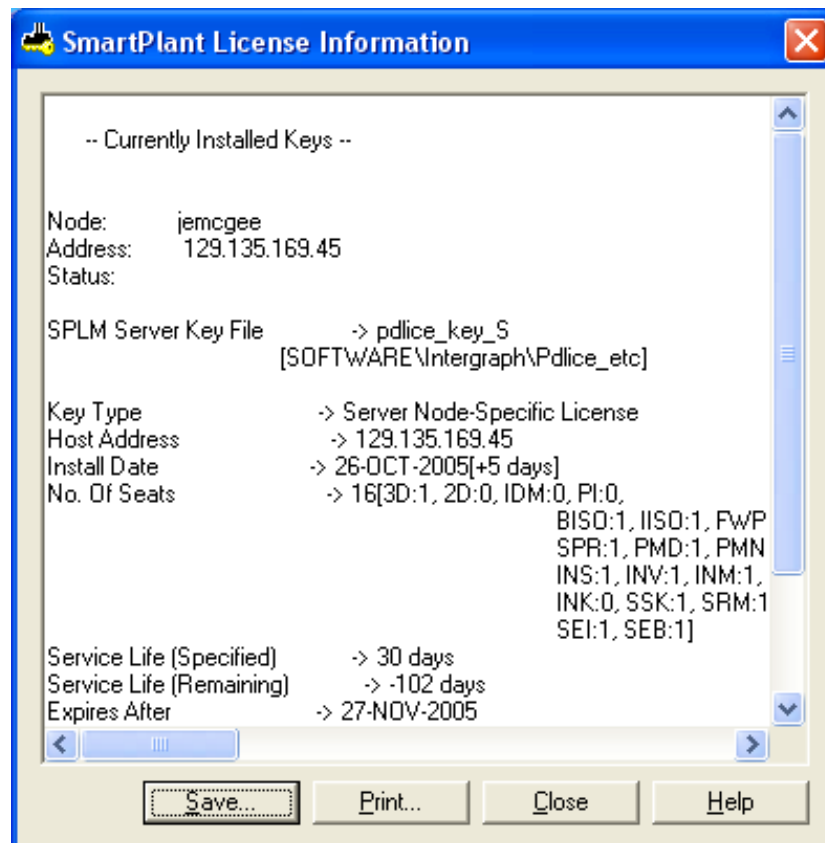
4. Enter your license key in the **License key** field.
5. Click **OK**.
6. Verify that the key installed correctly. Click **Show Key Status** on the **Display Options** dialog box. For more information, refer to *Displaying the Status of a License Key*, page 36.
7. Close SmartPlant License Manager.

After SmartPlant License Manager verifies the license key, the license database is installed. Then you can begin setting up the client computers that will be checking out licenses.

Using the SmartPlant License Manager Information Dialog Box

The SmartPlant License Manager Information dialog box displays requested information about SmartPlant License Manager. You can save its displayed information to a file, print the information, review on-line Help, or close the dialog box.

The following **SmartPlant License Information** dialog box shows that the server license key has been successfully installed on the license server.



Testing Communication

After the installation, check communication between the license server and client. Refer to *Testing for Reserving a Seat* (page 29), *Testing for Seat* (page 31), and *Troubleshooting and Error Messages* (page 54).

Administrative Tasks

The following sections provide details about configuring and testing your licenses, removing clients from the license server, modifying PDS daily licenses, and information about product tags and licensing.

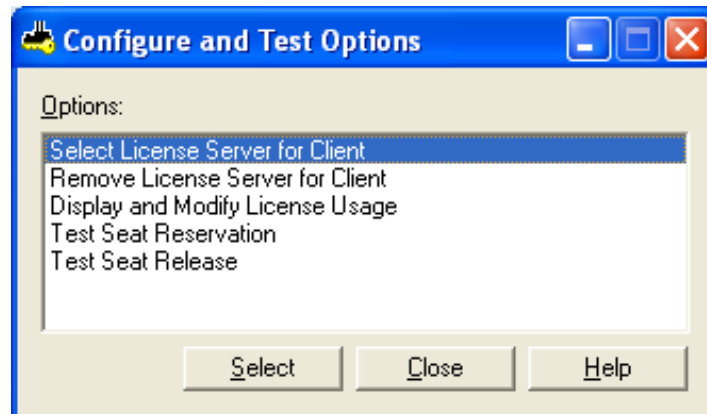
Configuring and Testing Licenses

When the SmartPlant License Manager key is successfully installed, you can configure and test your client computers. This section covers removing a client from the license server, displaying and modifying the license usage, and reserving and unreserving a license.

Use the following procedure to access the **Configure and Test Options** dialog box.

1. Click **Configure and Test Options** on the main SmartPlant License Manager dialog box.

The **Configure and Test Options** dialog box appears.



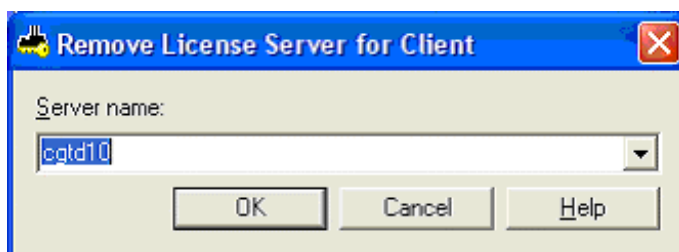
Removing a Client from the License Server

Use the following procedure to remove a client from the license server list.

1. Click **Remove License Server for Client** on the **Configure and Test** dialog box. In a Command Window, you can type `pdlice -k license_server` where *license_server* is the name of the license server.

This option removes the server name and the internet address from the `server_names` entry on the registry. Do not edit this entry manually.

The **Remove License Server for Client** dialog box appears.



2. Type the name of the server you want to remove in the **Server Name** field. If you selected your license server using the **Select License Server For Client** option, the server name automatically appears in the **Server Name** field or you can select it from the list. If you define your license server from the Command Prompt, you must type the server name.
3. Click **OK**.

The **SmartPlant License Manager Information** box appears.

Displaying and Modifying PDS Daily Licenses

Daily keys are available for PDS customers. PDS lease customers can specify whether daily keys can be used by interactive users, interactive and batch users, batch users only, or none. By default, a daily key cannot be activated without selecting these options. This command requires administrator privileges. These options need to be activated on the license server.

Use the following procedure to activate daily keys in PDS.

1. Click **Display and Modify License Usage**. (Or, type `pdlice -Q` in a Command Prompt window.)

The **Display and Modify License Usage** dialog box appears.



2. Place a check mark beside each option you want to use.

Allow interactive jobs to start new daily seats – Allows PDS daily license keys to be accessed by interactive users if checked. Interactive daily licenses are active for one 24-hour period.

Allow batch jobs to start new daily seats – Allows PDS daily license keys to be accessed by batch users if checked. Batch daily licenses are active for one 24-hour period.

Allow seats to use higher-level seats, if available – Allows PDS license keys to use higher-level seats, if any are available. This option applies only to PDS P&ID, IDM, and PDS 2D seats. For example, if no 2D seats (licenses) are available this option allows use of a 3D seat (license).

Daily keys, once activated, expire in 24 hours, regardless of how much actual processing time has been used. When a process that uses a daily license key completes and the 24-hour period for the daily license key has not expired, the daily license key becomes available for use by other processes regardless of what is specified using this option.

If a job is running at the end of the 24-hour period, the job is allowed to complete processing. When the processing is complete, the daily license key then expires.

To display the status of the daily license keys, refer to *Displaying the Status of Active PDS Daily Licenses*, page 37.

 Note

- If you cannot access your PDS PID Standalone licenses, check to be sure that you loaded the PDS PID Standalone product using the correct serial number.

Testing for Reserving a Seat

Use the following procedure to test whether a license can be reserved from the client. This is especially helpful in testing server and client communication after installation.

 Note

- If you purchased a PDS PID license, only the PDS PID application is available to use. If you purchased PDS 2D, the PDS PID, IDM, and PFD applications are available to use.

1. Click **Test Seat Reservation** on the **Configuration and Testing** dialog box.

The **Test Seat Reservation** dialog box appears.



2. Set the applicable options.

Server Name – Using the drop-down list, select the name of the server that you would like to reserve a seat with.

Batch – Activates batch processing mode.

Interactive – Activates interactive processing mode.

Time (Min) – Defines a wait time in minutes. The server you are requesting wait time on must have SmartPlant License Manager installed and a valid server license key assigned.

Product Tag – Type the tag for the appropriate product, as detailed in the following table. Be sure to enter a valid Product tag. This entry is case-sensitive.

Product	Product Tag
FrameWorks Plus	FWP
ISOGEN - Batch	4D
ISOGEN - Interactive	5D
Pelican Forge SupportModeler	PMD
Pelican Forge SupportManager	PMN
PDS PID	0 (zero)
PDS 2D	1
PDS 3D	2 or 3D
PDS IDM	3
SDNF Import	SDF
SmartPlant Electrical	SEL
SmartPlant Electrical Import (SEI)	SEI
SmartPlant Instrumentation (INtools) Standard	INS
SmartPlant Instrumentation (INtools) View Only / API	INV
SmartPlant Instrumentation (INtools) Maintenance	INM
SmartPlant P&ID	SPPD
SmartPlant Review	SPR
SmartSketch	SSK

3. Select your server name that automatically appears in the **Server name** field or select it from the drop-down list.
4. Select **Batch** or **Interactive**. To execute this option as a batch process, click the **Batch** option. The **Time (Min)** and **Product Tag** fields activate. Type the wait time in minutes and then type the product tag.
5. Click **OK**.

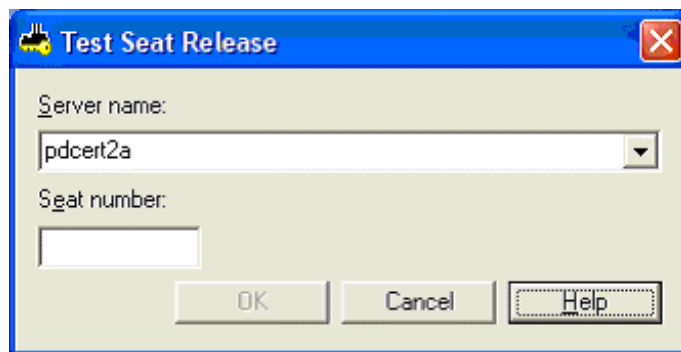
The SmartPlant License Manager Information dialog box appears. If you are testing client-server communication, note the seat number in the dialog box. The seat number information will be used in the **Test Seat Release** command.

Testing for Seat Release

Use the following procedure to ensure that a seat has been unreserved or released from a license.

1. Click **Test Seat Release** on the Configuration and Testing dialog box.

The **Test Seat Release** dialog box appears.



2. If the node name does not automatically appear in the **License Server** field, select it from the list or type the node name in the License Server field. Type the assigned number of the seat in the **Seat Number** field.
3. Click **OK**.

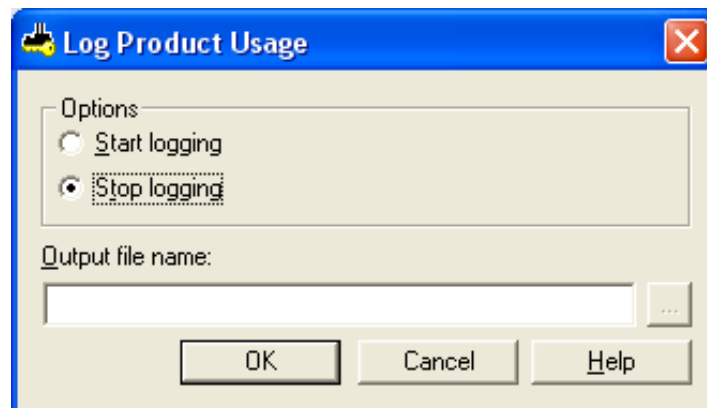
The SmartPlant License Manager Information dialog box appears with confirmation or error information.

Logging Product Usage

Use the following procedure to track product usage. If enabled, the Log Product Usage command tracks all licenses requested by a client. For example, when SmartPlant P&ID is opened on a client machine, a record is written to the log file. When SmartPlant P&ID is closed on that client machine, this is also recorded by the log file.

1. Select **Log Product Usage** on the SmartPlant License Manager main window and click **Select**.

The **Log Product Usage** dialog box appears.



2. If you want to record product usage, click the **Start logging** option. To stop recording product usage, click **Stop logging**.
3. Click in the **Output file name** field and enter the path and a file name for the output file that will contain the logging information. You can also click the **Browse** button  and select an existing file. Logging information is appended to an existing file.
4. Click **OK**.

As products are opened and closed, their usage is tracked and the details are written to the logging file you defined.

Note

- The Product Tag recorded in the log file is truncated to have up to 3 characters only. For example, for the SmartPlant P&ID application, the product tag is SPPD. This is recorded as SPP in the log file.

The first column in the log file is called Operator. The value of Operator indicates the following:

- 1 = Get license
- 2 = Return license
- 11 = No license available when requested
- 12 = License returned by scavenge
- 31 = License Checkout
- 32 = Returning a Checkout license

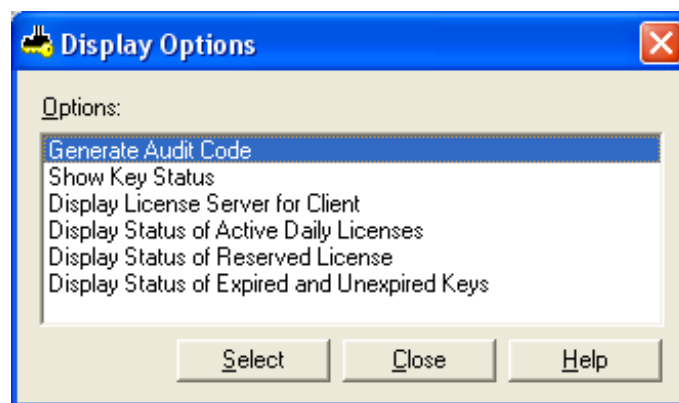
Monitoring SmartPlant License Manager Licenses and Keys

This section explains the SmartPlant License Manager tools for the following monitoring tasks:

Use the following procedure to access the SmartPlant License Manager monitoring functions.

1. Click **Display** on the main SmartPlant License Manager dialog box.

The **Display Options** dialog box appears.



These commands sometimes display information in the **SmartPlant License Information** dialog box. In some fields on that dialog box, product abbreviations are used instead of the full product names. Here is a list of the products and their abbreviations as used in this dialog box.

<i>Product Abbreviation</i>	<i>Product Name</i>
BISO	ISOGEN – Batch
3D	PDS 3D
2D	PDS 2D
IDM	PDS IDM
PI	PDS 2D PID
IISO	Interactive ISO
FWP	FrameWorks Plus

<i>Product Abbreviation</i>	<i>Product Name</i>
SDNF	SDNF
SPR	SmartPlant Review
PMD	Pelican Forge SupportModeler
PMN	Pelican Forge SupportManager
SPPD	SmartPlant P&ID
INS	SmartPlant Instrumentation (INtools) Standard
INV	SmartPlant Instrumentation (INtools) View Only / API
INM	SmartPlant Instrumentation (INtools) Maintenance
INK	Not used.
SSK	SmartSketch
SRM	SmartPlant Review Modules
SEL	SmartPlant Electrical
SEI	SmartPlant Electrical Import

For more information, refer to:

- *Generating an Audit Code*, page 36
- *Displaying the Status of a License Key*, page 36
- *Displaying the License Server for a Client*, page 36
- *Displaying the Status of Active PDS Daily Licenses*, page 37
- *Displaying the Status of Reserved Licenses*, page 37
- *Displaying the Status of Expired and Unexpired Keys*, page 38

Generating an Audit Code

Intergraph Support Services uses the audit code from a customer's system for monitoring and troubleshooting customer system issues. For example, Intergraph can help determine proper licensing involving new servers and moving software. There is no need to generate an audit code unless Intergraph Support Services requests it.

1. Click **Generate Auditing Code** on the Display Options dialog box. (Or, type `pdlice -e` in a Command Prompt window.)

The SmartPlant License Manager Information dialog box appears with the audit code.

2. Click **Save** to save the audit code information to a text file. Send the text file to Intergraph.

Displaying the Status of a License Key

Use the following procedure to verify the correct installation of a license key or to check the status of the currently installed license key.

1. Click **Show Key Status** on the **Display Options** dialog box. (Or, type `pdlice -f` in a Command Prompt window.)

The **SmartPlant License Information** dialog box appears with the following information: node, address, key type, installation date, number of licenses, expiration date, and daily licenses (if purchased). You can save this displayed information to a file, print the information, review on-line Help, or close the dialog box.

Displaying the License Server for a Client

Use the following procedure to display the list of license servers for a client.

1. Click **Display License Server for Client** on the **Display Options** dialog box. (Or, type `pdlice -l` in a Command Prompt window.)

The **SmartPlant License Information** dialog box appears.

Displaying the Status of Active PDS Daily Licenses

Monitoring the use of PDS daily licenses includes information about daily licenses currently checked out, licenses currently active, and daily licenses available for future use.

Use the following procedure to display the status of the daily keys.

1. Click **Display Status of Active Daily Licenses** on the Display Options dialog box. (Or, type `pdlice -M` in a Command Prompt window.)

The **SmartPlant License Information** dialog box appears.

Displaying the Status of Reserved Licenses

Use the following procedure to display the status of licenses in use. Use this option if a license remains checked out when you believe the license should have been returned.

1. Click **Display Status of Reserved License** on the Display Options dialog box. (Or, type `pdlice -m` in a Command Prompt window.)

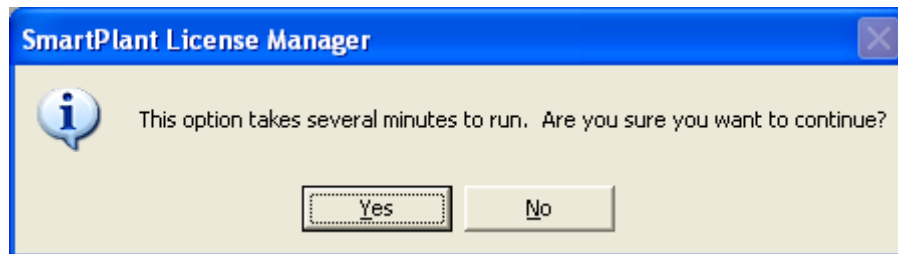
The SmartPlant License Manager Information dialog box appears.

Displaying the Status of Expired and Unexpired Keys

Use the following procedure to list information about other license servers on your LAN. The displayed information includes the license expiration date, total licenses and available licenses, computer IP address, and computer name.

1. Click **Display Status of Expired and Unexpired License** on the Display Options dialog box. (Or, type `pdlice -B` in a Command Prompt window.)

A three-minute timer runs while SmartPlant License Manager waits for replies. It is possible that some computers may not reply during this three-minute period. A message box appears, reminding you that this option takes time to run.



2. Click **Yes** to continue.

The SmartPlant License Manager Information dialog box appears. It contains data about all license servers on your LAN. You can save its displayed information to a file, print the information, review on-line Help, or close the dialog box.

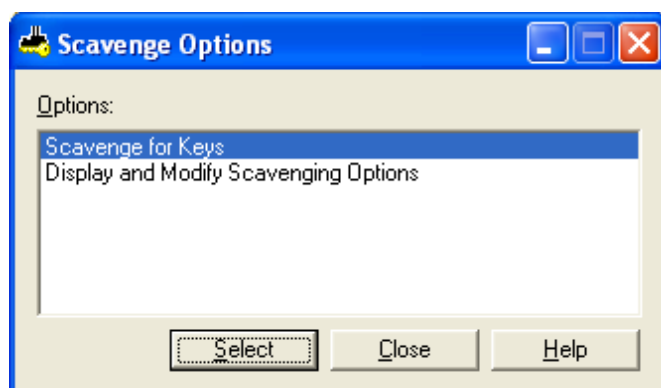
Managing License Usage / Returning Unused Licenses

SmartPlant License Manager enables you to control license usage from the license server and to find (scavenge) and return unused licenses.

Use the following procedure to access the **Scavenge Options** dialog box.

1. Log onto the license server. (This option is available only on the license server.)
2. Click **Scavenge** on the main SmartPlant License Manager dialog box.

The **Scavenge Options** dialog box appears.



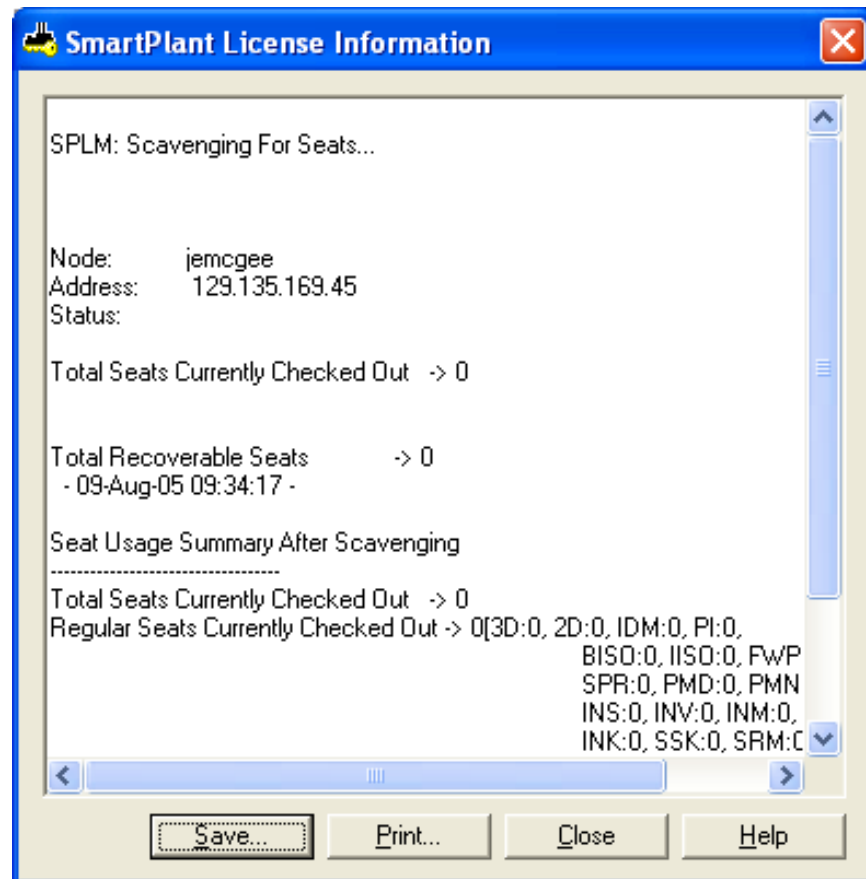
Finding Unassigned Licenses

Scavenging for license keys finds licenses that have been checked out, but are no longer in use. This situation can happen when a computer fails while a license is checked out or an unexpected termination occurs.

Use the following procedure to scavenge for unused keys.

1. Click **Scavenge for Keys** on the **Scavenging Options** dialog box. (Or, type `pdlice -n` in a Command Prompt window.)

The SmartPlant License Manager Information dialog box appears.



If a license remains checked out when you think it should have been returned, check to be sure the process identified with the process ID is legitimate. This may involve asking the engineer who is using the client node and checking to make sure that the process is still running by monitoring how much CPU time it is using.

If obtaining an available license is a higher priority than preserving an active process, you can kill the process using Task Manager so that the license it is using is made available. Use this drastic measure only when other options to get the license returned have failed. You must be absolutely certain that the process in question is no longer needed.

Modifying and Displaying Scavenging Processes

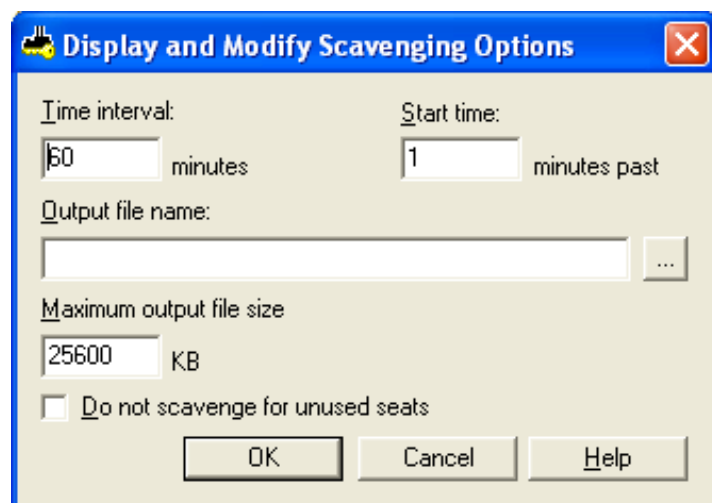
Scavenging is automatically enabled for one minute past the hour.

Use the following procedure to modify the interval or to save a log of the scavenging operation.

1. Click **Display and Modify Scavenging Options** on the **Scavenge Options** dialog box. (Or, type `pdlice -N` in a Command Prompt window.)

This command requires system administrator privileges.

The Display and Modify Scavenging Options dialog box appears.



2. Set the applicable options.

Time interval (minutes) – Modifies/sets scavenging time in minutes.

Start time (Minutes past) – Sets a scavenging time to begin at any specified minute past the hour. Valid values are 0-59 minutes.

Output file name – Defines an output file name that contains your scavenging information.

Maximum output file size – Defines the maximum size of your output file.

Do not scavenge for unused seats – Click to place a check mark in the check box if you do not want the system to scavenge for unused seats.

3. Click **OK**.

Removing SmartPlant License Manager

Use this procedure with caution and only when you want to remove the complete SmartPlant License Manager product from your computer.

1. Click **Start > Control Panel**.
The **Control Panel** window appears.
2. Click **Add or Remove Programs**.
3. Select SmartPlant License Manager.
4. Click **Remove**.

Frequently Asked Questions (FAQ)

Please refer to the SmartPlant License Manager FAQ on the Web in the eCustomer system for the most current FAQ as it is continually updated. Click <https://crmweb.intergraph.com> and select **Products > SPLM/PD_Lice**.

Purchasing Licenses FAQ

Is there a form to use for requesting licenses?

Yes, there is a PDF form and the same content in an Excel spreadsheet. All products except INtools 6.0 and older use the same form, which is found on each product's Web page in the **Learn More** list. For example, go to the following Web page for SmartPlant Review and click **Learn More**:

http://ppm.intergraph.com/visualization/sp_review.asp

The following Web page lists all products:

<http://ppm.intergraph.com/products/>

INtools 6.0 and older uses its own form, also found on the INtools Web page. Both forms are included in the *SmartPlant License Manager Installation and User's Guide*, are delivered with the licenses, and are available on the Web in the eCustomer system. Click in the **Product Documentation** link under the Search entry box.

<https://crmweb.intergraph.com>

How do I purchase licenses at the eLicense web site?

Contact the local Intergraph office or access the eLicense web site to request an upgrade of the lease profile to include purchase licenses.

<https://ppmapps.intergraph.com/elicense/>

Where can I find SmartPlant License Manager and other products to download?

SmartPlant License Manager is available from the following web page:

<https://crmweb.intergraph.com>

Select **Self Service > Download software updates > Products > SPLM (PD_Lice) > SmartPlant License Manager**. You do not need a serial number to install SmartPlant License Manager. For more information, refer to *Using eLicense to Generate SmartPlant License Manager Keys* on page 79.

Can I divide the licenses for one LAN into several license servers for the purpose of managing project access, for example, or as coverage in the event that my license server goes down?

Yes, you can divide the licenses. You need a form for each license server.

General Topics FAQ

How do I generate Machine identifier?

If SPLM is installed you can execute the command **Generate Machine ID** from Start menu.

If 7.3 PD_Lice is installed, you need to download the splmGenMachineID.exe on your machine. Run the executable from the Command Prompt with the output file included as an argument. For example, enter:

```
c:\win32app\ingr\pdlice\bin\splmGenMachineID c:\temp\machine_id.txt
```

Do I need to remove the existing key in order to input a new license key?

No, you do not need to remove the existing license if you are using SmartPlant License Manager 8.0 or later. If you have already requested a new license by sending your Machine ID, you should not remove the existing key. Otherwise, the new key obtained from Intergraph will not install and you need to re-generate the machine ID and request another license key.

How can I install a new license key when I am going to be out of the office? For example, the existing key expires on July 1 and I will be on vacation from June 24 – July 4.

It is now possible to install license key using a scheduled job. The prompt that displayed when installing a new key has been removed from the command line interface. This will allow the administrator the ability to install the new key at the time when the old key expires without having to be in the office. To do this create a .bat file that contains text as shown below. Then, schedule the batch file as required. In this example, request the key install date to be on July 1 and schedule the batch job to run at 12:01 A.M. on July 1. Be sure there is a valid path entry for the specified output file.

```
pdlice -a keyvaluehere >>outputfilehere
```

What products are new to SmartPlant License Manager 8.0?

SmartSketch 5.0/SP1, SmartPlant Electrical 3.5, SmartPlant Instrumentation (formerly INtools) 7.0, and SmartPlant Review 6.1. Not all SmartSketch 5.0/SP1 installations require SmartPlant License Manager. Ask your System Administrator or contact Intergraph Support Services if you have a question about SmartSketch licensing.

Is the SmartPlant License Manager User's Guide delivered with the software products?

Yes. The *SmartPlant License Manager Installations and User's Guide* (document number DPDS3-PB-200019x) is included with all products that require SmartPlant License Manager. The document is also available with the product documentation at <http://crmweb.intergraph.com/>.

The document explains the features, setup options, installation, license control, software messages, and troubleshooting. It also includes samples of the online license request forms.

What is a license server?

The license server is the computer where the license key is loaded; it can be a standard computer or a server. The license key tells the license server how many licenses it can issue. Clients of a license server are computers where SmartPlant License Manager is installed and pointing to the server. The computer where you start the software (such as PDS or SmartPlant P&ID) asks the license server for a license. If a license is available, the license server provides it. If all licenses are in use, the client is not granted a license.

How does the PDLICE_WAIT variable work?

When you submit interactive jobs, the jobs do not wait for licenses if none are available. You are notified immediately that the jobs did not start. You can retry at once; however, the PDLICE_WAIT environment variable affects this waiting time if it is set. Intergraph recommends that you set this variable as a system environment variable.

If the client is attempting to run a batch job when there is no license available, the job will go in the queue and appears to be running, but will wait up to 12 hours for a license to become available. You can change the total wait time, 8 hours or 480 minutes, by setting the PDLICE_WAIT environment variable on the client computer that wanted to obtain the license.

Do I have to have one license server for each LAN?

No, your configuration is entirely up to you.

How are the number of licenses for a given license server determined?

The number of licenses covered by a license key equals the total number of licenses that you have purchased or are leasing for each LAN ID listed for that license server. Intergraph records determine the correct number of licenses for the key.

To change the number of licenses for a LAN, use the License Key Request Forms, on page 64 in the *SmartPlant License Manager Installation and Users Guide* and available on the Web site under the **Learn More** link:

<http://ppm.intergraph.com/pds>

Sending this form does not change your number of licenses; it notifies Intergraph that you want to do so. A valid purchase order is required to increase the number of licenses for your LAN.

Does the installation date have to be precise?

The key can be installed any time during the 5-day period that begins with the installation date you provide. For example, if you request 01-July-2005 as the installation date, the key can be installed on 01-July, 02-July, 03-July, 04-July, 05-July, or 06-July.

Can I make an educated guess at my installation date?

Yes. Intergraph will provide a key within 48 hours of receipt of your request (via mail or phone). Please ensure that the date you request is the actual date that you will install the key, making sure that all necessary software is available and loaded before that date. We request that you notify us as early as possible.

If you are consolidating license server administration on one license server for multiple LANs, use the License Key Request Forms, on page 64 in the *SmartPlant License Manager Installation and Users Guide*.

What happens if my licensing server goes down?

You will be unable to check out licenses from this server until it is back in use. Processes that already have licenses checked out are not affected by the fact that the license server is unavailable.

In extreme situations, it is possible to request emergency node-locked licenses from Intergraph. They are installed on the client computer rather than a licensing server. Contact your local Delivery support representative for more information.

What happens if the license server is rebooted in the middle of my design session?

Nothing. Licensing does not depend on maintaining a continuous communications link to the license server.

What happens if my license server goes down for an extended period of time?

Intergraph can provide temporary node-locked emergency licenses over the telephone. Contact your local Delivery support representative for more information.

What happens if my local computer goes down after I've obtained a license?

If the scavenger cannot contact the client computer during scavenging, the license is marked for a 16-hour hold before it is released. The scavenger periodically advances this 16-hour timer for each license. It is important to schedule the scavenger to run regularly, at least every hour. If the client is in contact sooner, the hold is voided and normal scavenging takes over.

I am running out of licenses earlier than I believe I should be. How can I troubleshoot to understand what is happening?

Have your users click **Scavenge for Keys** on the **Scavenge Options** dialog box or you can type `pdlice -n` in a Command Prompt window.

If you think that client nodes are improperly holding onto licenses, examine the results of the Display Status of Reserved License or you can type `pdlice -M` in the Command Prompt. This shows you which client nodes have licenses checked out. If a client computer has no plant design-related activity and it is still holding licenses, rebooting that client and then scavenging from the server may free some licenses.

If possible, find out what was processing when the job stopped. This information can help you and/or Intergraph determine the underlying cause of the termination. Save the output of any scavenging process that returns a license. This information will provide the reasons why the license was returned. The output of the scavenger includes the following information: nodename, product tag, batch mode (Yes/No), process ID, and checkout time.

What do I type to see the number of licenses?

Click **Show Key Status** from the **Display Options** dialog box to show the status of your keys.

How can I tell who is using a license?

Click **Display Status of Reserved License** on the **Display Options** dialog box. You can also enable the Log Product Usage command to monitor license usage.

We installed a key for three licenses, but we can operate only two licenses at the same time. Why?

There can be several reasons.

Click **Display Status of Reserved License** on the **Display Options** dialog box to determine the number of licenses that your key contains.

Click **Scavenge for Keys** on the **Scavenge Options** dialog box to scavenge for the third license that you are unable to use.

Verify that clients and servers can telnet to each other. Look for anomalies such as two nodes on the network with the same name or the reuse of an old name for a new computer, but with some traces of the old computer still existing in files on the network.

PDS, FrameWorks Plus and ISOGEN FAQ

I am currently using PD_Lice on my license server. Can I still register a new key for PD_Lice?

No. All new keys for Process, Power, and Marine software that utilize SmartPlant License Manager software require SmartPlant License Manager 8.0.2 or later on the license server.

What version of SmartPlant License Manager is required for PDS 8.0?

PDS 8.0, SmartPlant Review 6.1, and SmartSketch 5.1 require SmartPlant License Manager 8.0.2 or later on the client and server.

Can I use different versions of SmartPlant License Manager?

To guarantee compatibility, it is recommended to install SmartPlant License Manager 8.0.2 or later on a client and the server.

SmartPlant License Manager changed to include more products as of 8.0. How is Intergraph notifying its PDS U.S. customers about the use of SmartPlant License Manager 8.0? These customers may be using PDS 7.0 or 7.1. Is there an official document from Intergraph to its customer to let them know about this change?

Intergraph Software Distribution will notify PDS customer contacts. The eLicense Web page for requesting keys will also include a notice.

How many licenses are recommended as a minimum for each operator (user) to work interactively as well as to start batch processes such as isometrics, reports, model creations, and so forth?

There is no standard recommendation. If you are working in interactive mode only, then you only need one license. If you often run batch jobs while also working interactively, then you need two or more (although batch jobs can be scheduled to occur during off hours). Look closely at the site workflow to determine whether different formulas may be required within a customer site for different departments. For example, in a piping department where designers only are considered, the workflow requires four licenses for every three people.

How are ISOGEN licenses handled?

SmartPlant License Manager requires the use of a license to run ISOGEN, a third-party product. Interactive isometric generation uses one Interactive ISOGEN license, while batch isometric generation uses one Batch ISOGEN license and one PDS 3D license.

How are batch jobs handled?

Batch jobs request a license at the time they are scheduled to run. If a license is not immediately available, the jobs wait until a license is available, and then the jobs start.

Will an ISOGEN batch job take an interactive license?

No. The batch job will not take an interactive license and an interactive job will not take a batch license.

What is required to extract an Isometric drawing?

Extracting an isometric drawing requires either an SBISO or SIISO license in addition to a 3D license.

What do I type to see the number of remaining PDS daily keys?

Click **Display Status of Active Daily Licenses** on the **Display Options** dialog box to show the number of your remaining daily keys.

How can I save a weekly record of PDS daily keys?

You can save the output from the auditing process.

Click **Display Status of Active Daily Licenses** on the **Display Options** dialog box to show the number of your remaining PDS daily keys. Click **Save** to display the Save File dialog box. Select a folder and file name to save the information to a file that you can use for later reference. Click **OK** to save the file.

Why does the plot command, in PD_Draw, for example, require a license? Isn't plotting a non-PDS function?

Plotting is not a PDS function. When a PDS module such as PD_Draw starts a batch job, there are many processes that must complete before the job is submitted to the plotter. In the case of PD_Draw, the software is doing tasks such as mounting files, setting their levels, and so forth. These processes must complete before the job is actually submitted to the plotter. After the job is submitted to the plotter, PD_Draw is no longer executing a batch job and the license is released. PDS does not use a license after it has completed its work and submitted the job to the plotter.

I expect PD_ISO to release a license as soon as the .idf file is generated, but this does not seem to be the case. Why not?

Batch isometric generation uses a PDS license from the time the batch job first starts pdsidf until the project database has been updated for the last line in a batch job. PDS is working until the last line has been processed. In addition, a batch isometric generation uses a Batch ISOGEN license.

Refer to the *PDS ISOGEN Reference Guide* for a basic description of the processes involved during a batch isometric run.

I purchased PDS, but I am not on maintenance and need to move my key to a new TCP/IP address. Since I cannot access the eCustomer Web site, how do I get the SmartPlant License Manager software?

Call Huntsville Support at 1-800-766-7701 or the local Intergraph office. For U.S. customers, Huntsville Support will provide the software via e-mail or the Intergraph external ftp site. For international customers, the local Intergraph office can download SmartPlant License Manager from eCustomer Web site and provide it to customers.

My company purchased copies of FrameWorks Plus Standalone in addition to the PDS licenses that we purchased. When I enter FrameWorks Plus through PD_Shell, a PDS license is used. Why?

When you access any module or product through PD_Shell, you are using it as a PDS module and thus a PDS license is used.

Does a FrameWorks Plus 7.2 or later Standalone license require SmartPlant License Manager? Can I still use my FrameWorks Plus Standalone license without taking a PDS 3D license?

FrameWorks Plus 7.2 standalone licenses are controlled separately from PDS 3D licenses. Therefore, FrameWorks Plus standalone requires a separate license key from PDS 3D. However, as in previous releases, a PDS 3D license is used when FrameWorks Plus is installed with a PDS serial number.

In PDS, is a license necessary to start only PD_SHELL, or does the licensing process begin with choosing a module such as Design, Isometrics, or something else?

Licensing begins when you actually select a module, such as PDS2D, PD_Design, and so on.

Working interactively in ISOGEN requires one license. Is it possible to start batch processes for a single workstation with one license?

You can schedule batch processes to run when the interactive license is not being used.

Is it possible to have purchased and leased licenses served from only one license server?

Yes. The licensing software does not differentiate between leased or purchased licenses. It only considers what is executing on the LAN.

Which products can have daily licenses?

Only PDS has daily licenses.

I have installed SmartPlant License Manager using a computer name of H2U8R3. Since installing SmartPlant License Manager, I have changed my old computer name to a new, more sensible name. SmartPlant License Manager still remembers my old computer name. Where does the system store this information and how can I change it?

Computer names and TCP/IP addresses reside in a DNS (Domain Name Service) database. To specify the DNS database or TCP/IP address, the Network Connections in the Control Panel.

My PDS PID Standalone licenses are never used. Why?

Verify that your PDS PID Standalone product was installed using your PDS PID Standalone serial number.

Which versions of PDS are compatible with SmartPlant License Manager?

This question has two possible answers.

1. PDS Software is NOT loaded on the same computer as SmartPlant License Server.

This means the license server is a standalone computer performing no other PDS function. PDS versions 7.0 and later are compatible with SmartPlant License Manager. Note that the client computers should have matching versions of SmartPlant License Manager loaded.

2. PDS software is loaded on the same computer as SmartPlant License Manager license server.

This situation occurs when the license server is also acting as a PDS workstation or a Batch server, such as an ISOGEN server.

PDS versions 7.0 and later are compatible with SmartPlant License Manager. For example, PD_Shell and other PDS modules with version number 7.0 will work fine with SmartPlant License Manager loaded on the same computer.

PDS Versions 6.4.1 and earlier do not work “out of the box” with SmartPlant License Manager. Please contact software support if you are using PDS 6.4.1.

SmartSketch and SmartPlant Products FAQ

What’s the first release of SmartSketch that requires SmartPlant License Manager?

Some installations of SmartSketch 5.0/SP1 require SmartPlant License Manager. Check with your System Administrator or contact Intergraph if you are not sure about installation.

Which versions of SmartPlant Electrical and SmartPlant Instrumentation (formerly INtools) use SmartPlant License Manager?

SmartPlant Electrical and SmartPlant Instrumentation 7.0 requires SmartPlant License Manager. Use the SmartPlant license request form to request license keys for SmartPlant Instrumentation, not the INtools license request form.

Can SmartPlant Review 5.0 or later still be used on a laptop with SmartPlant License Manager? Can SmartSketch 5.0/SP1?

Yes. Install SmartPlant License Manager on the laptop and use the laptop as the license server. SmartPlant License Manager can be installed from the product CD or from the eCustomer Web site (<http://crmweb.intergraph.com/>). You must request a license key for the laptop.

SmartPlant Review 6.1 simplifies this process by using SmartPlant License Manager and the new License Checkout Utility. See the *SmartPlant Review Installation Guide* for more information about checking out a license to a laptop computer.

When SmartPlant Instrumentation or INtools is on a machine that is disconnected from the network without exiting the product, how long is the license held?

16 hours.

Is SmartPlant Review 5.0 compatible with PDS 7.0?

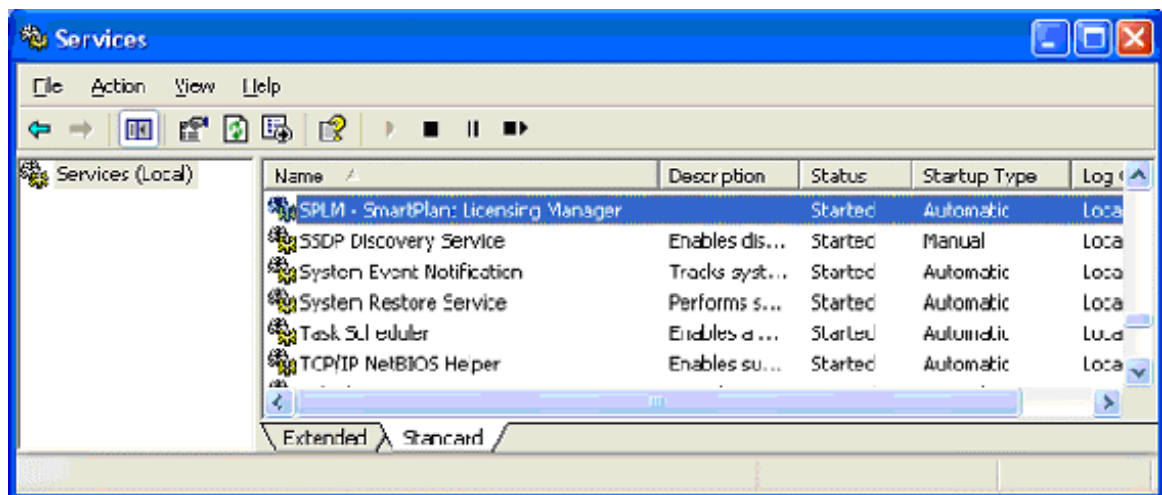
The .dri and .drv files generated by all PDS versions are compatible with SmartPlant Review 5.0.

Troubleshooting and Error Messages

Troubleshooting

Verify that the SPLM-SmartPlant License Manager service is started

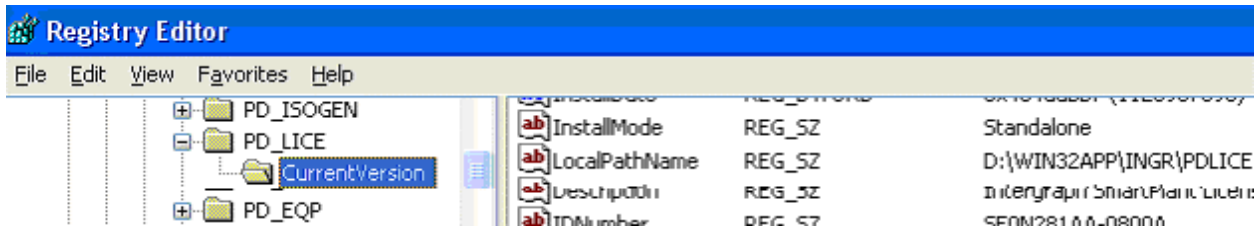
1. Click **Start > Settings > Control Panel > Administrative Tools > Services**.
2. In the Services dialog box, scroll down the list and verify that the SPLM - SmartPlant License Manager service has a status of **Started** and that Startup is set to **Automatic**.



Refer to Installing and Starting the SmartPlant License Manager Service, page 55, for information about stopping and starting the licensing service.

Verify that the registry keys have been created

1. In a Command Prompt window, type **regedt32**.
Several Registry windows appear.
2. Select the **HKEY_LOCAL_MACHINE** window.



3. Expand the SOFTWARE\Intergraph\PD_LICE\Current Version folder to display information about the current version of SmartPlant License Manager.
4. Expand the SOFTWARE\Intergraph\Pdlice_etc folder. You should have a Server_names file. You may also have a pdlice_key_S file if it is a license server.

Installing and Starting the SmartPlant License Manager Service

SmartPlant License Manager installs and starts the SmartPlant License Manager service during installation, so Administrators won't normally need to use this command.

Use the following procedure to install and start the SmartPlant License Manager service. This command requires system administrator privileges.

1. On the **Install and Remove Options** dialog box, click **Install and Start Licensing Service**. (Or, type `pdlice -I` in a Command Prompt window.)

A message box confirms that the service has been installed and started.

Stopping the SmartPlant License Manager Service

In the rare instance when the SmartPlant License Manager executable stops running, you can restart it by stopping and restarting the SmartPlant License Manager service. Use the following procedure to stop the SmartPlant License Manager service. This command requires system administrator privileges.

1. On the **Install and Remove Options** dialog box, click **Stop and Remove Licensing Service**. (Or, type `pdlice -R` in a Command Prompt window.)
A message box appears to ensure that you want to remove the service.
2. Click **Yes** to stop the licensing service on this computer. Click **No** to dismiss this dialog box and keep the licensing service running on the computer.
If you click Yes, a message confirms that the licensing service is stopped.

Restart the SmartPlant License Manager service as explained in *Installing and Starting the SmartPlant License Manager Service*, page 55.

Installing SmartPlant License Manager on a Standalone System

SmartPlant License Manager requires a static IP Address in the license server. If it is not possible to have a static IP Address on your system, you can install a virtual network adapter. The following procedure explains how to install and configure Microsoft Loopback Adapter.

Installing Microsoft Loopback Adapter using Microsoft Windows XP

1. Log on to the computer using the Administrator account.
2. Click **Start > Control Panel**.
3. If you are in Classic view of the Control Panel, click **Add Hardware**. If you are in the Category View, click **Printers and Other Hardware**.
4. Select **Add Hardware** under See Also in the left pane.
5. The **Add Hardware Wizard** appears.
6. Click **Next**.
7. Click **Yes, I have already connected the hardware**.
8. Click **Next**.

9. Select **Add a new hardware device**.
10. Click **Next**.
11. Click **Install the hardware that I manually select from a list**.
12. Click **Next**.
13. Click **Network adapters**.
14. Click **Next**.
15. In the **Manufacturer** list, click **Microsoft**.
16. In the **Network Adapter** list, click **Microsoft Loopback Adapter**.
17. Click **Next**.
18. Click **Finish**.

For more information refer to the Microsoft Web site (<http://support.microsoft.com/>). You can search for the following articles: *How to install the Microsoft Loopback adapter in Windows XP* and *How To Install Microsoft Loopback Adapter in Windows 2000*.

Configuring a Static IP Address for the Microsoft Loopback Adapter

1. Log on to the computer using the Administrator account.
2. Click **Start > Control Panel**.
3. Double-click **Network Connections**. The **Network Connections** dialog box displays.
4. Right-click on the Loopback Adapter installed previously and select **Properties**. By default, the loopback adapter name is Local Area Connection # where # is the adapter's number.
5. Select **Internet Protocol (TCP/IP)**.
6. Select **Properties**.
7. The **Internet Protocol TCP/IP Properties** dialog box appears.
8. Click **Use the following IP address**
9. Type in the IP address, for example, 192.168.0.1
10. Type in the Subnet mask, for example, 255.255.255.0.

11. Click **OK** to dismiss the **Internet Protocol TCP/IP Properties** dialog
12. Click **OK** to dismiss the **Loopback Adapter Properties**.

Configuring Advanced Settings for the Microsoft Loopback Adapter

This section explains how to move the Microsoft Loopback Adapter to the top of the list of network connections so the Machine Identifier will gather the information from the Loopback Adapter to generate the code.

1. Click **Start > Control Panel**.
2. Double-click **Network Connections**. The **Network Connections** window displays.
3. Select **Advanced > Advanced Settings**.
4. The **Advanced Settings** dialog box displays. The **Adapters and Bindings** setting displays a list of connections. These connections are listed in the order they are accessed by network services.
5. Highlight the **Loopback Adapter**.
6. Click the green up arrow.
7. Click **OK** to dismiss the **Advanced Settings** dialog box.
8. Close the **Network Connections** window.

Installing SmartPlant License Manager on a Laptop and Generating the Machine ID

1. Download the latest SPLM software from the eCustomer Web Site.
(https://crmweb.intergraph.com/ecustomer_enus/start.swe?SWECmd=Start&SWEHo=crmweb.intergraph.com)
2. Install SmartPlant License Manager in the default folder.
3. Select **Generate Machine ID** from the Intergraph Smartplant License Manager program group.
4. Send the Machine ID output to Intergraph to request a license key.

 Note

- If all the previous steps described in this section were performed correctly, SmartPlant License Manager should work if the laptop is connected to the network or not. No extra step is required when the laptop is connected back to the network.

Configuring Windows Firewall in Windows XP SP 2 and Windows 2003 SP 1 for SmartPlant License Manager

SmartPlant License Manager utilizes Transmission Control Protocol (TCP) ports to pass license seats from the SmartPlant License Manager server(s) to the workstation(s). TCP port 807 is utilized by the SmartPlant License Manager server to 'listen' for requests from the workstation(s) for a license seat. If a request is made, a random TCP port is utilized to pass the seat from server to client.

 Note

- Port 807 is being used by hardware manufacturers to support access to networks via wireless cellular connections. This causes a conflict with SmartPlant License Manager. Removing any device (such as an air card) and software associated with port 807 will resolve the conflict. This is becoming more of an issue because of the popularity of cellular network connection devices which are becoming known as air cards in the wireless industry. These devices are often used with laptop computers to gain access to networks via communication to a cell tower the same way the common cell phone connects. This is what distinguishes these devices from a standard wireless network card that locates a network from a "wireless access point" (hot spot).

Since a firewall is used to prevent unauthorized port access, SmartPlant License Manager has problems working properly with a firewall. Most firewall programs allow an Administrator to *open* ports to prevent the firewall from interfering with a programs execution. Because SmartPlant License Manager utilizes random ports, there is not a good way to do this unless the firewall program also allows programs to be added to a program list to *open* ports required by the program. The firewall that is delivered with Microsoft Windows XP and Microsoft Windows 2003 is such a firewall program.

If the user exits the application properly, the license used by the workstation is released back to the pool of licenses available. Sometimes, when an application process is abnormally exited, the license seat can be hung. This is where the SmartPlant License Manager server can help. A scavenger routine can be setup to run that will scavenge the network for seats that are *checked out*. If one is found, the seat can be returned to the pool if it is no longer in use. The firewall prevents the server from retrieving the seat and returns a *timed out* error message.

After installing SP 2 for Microsoft Windows XP or SP1 for Microsoft Windows 2003, *pdlice.exe* needs to be added to the **Exception List** for the **Windows Firewall** (if it is turned on). The following steps will add the appropriate SmartPlant License Manager program to the **Exception List**, allowing proper scavenging and access to the license server:

1. Click **Start > Control Panel > Windows Firewall**.
2. On the **Exceptions** tab in the **Windows Firewall** dialog box, click **Add Program**.
3. In the **Add a Program** dialog box, click **Browse**.
4. In the **Browse** dialog box, find the location of the *pdlice.exe* program (default location is: *c:\win32app\ingr\pdlice\bin* or *c:\win32app\ingr\splm\bin*) in the **File name** box.
5. Click **Open**.
6. In the **Add a Program** dialog box, click **Change Scope**.
7. Select the **My Network (subnet) only** option.
8. Click **OK**.
9. Click **OK** on the **Add a Program** dialog box.
10. On the **Exceptions** tab, verify that *pdlice.exe* has been added to the *Programs and Services* list.
11. Click **OK** to dismiss **Windows Firewall**.



Note

- *[Connecting Socket] Connection Time Out* is the error message you will receive if the *pdlice.exe* is not defined in the Windows Firewall exception list.

Error Messages

Cannot Receive Full Packet

Bad Network Packet; Check PDLICE (Cl/Srv) versions

These messages both indicate a mismatch of SmartPlant License Manager versions. PD_LICE Version 1.0 is incompatible with any later release of PD_LICE. You must remove version 1.0 and install a later version of PD_LICE or SmartPlant License Manager. To check your current version of PD_LICE, click About PD_LICE on the main PD_LICE window or in SmartPlant License Manager, click **Help > About SmartPlant License Manager** on the main dialog box.

[Connecting Socket] Connection Time Out

Displays if the pdlice.exe is not defined in the Windows Firewall exception list. To resolve the error add pdlice.exe in the Windows Firewall's exception list in the client and the server machine if the OS is Windows XP SP2 or Windows 2003 SP1.

Connection Refused

Reserving licenses on clients or the server fails. The SmartPlant License Information message box displays the Connection refused message. Restarting the service will solve the error.

Connection Reset by Peer

This message displays if you have the Panda antivirus software installed on the machine or the UNC path is defined for the logging report.

Could not set install date

Appears during the installation of SmartPlant License Manager. This problem has been reported on machines with German Microsoft Windows XP (SP2) and Microsoft Windows 2003 (SP1). To resolve the problem, reinstall the operating system's Service Pack.

ftp server failing (looping), service terminated

The inetd process is refusing your connection attempts. This indicates that the inetd daemon has too many connection requests. Requests are refused for 10 minutes. This can happen during scavenging or if too many clients are simultaneously requesting access.

On the computer that is refusing the connection, stop the SmartPlant License Manager service. To stop the service, click Stop and Remove Licensing Service on the Install and Remove Options dialog box. To restart the licensing service, click Install and Start Licensing Service on the Install and Remove Options dialog box.

[Opening File] - No such file or directory - /etc/file_name

A license has not been installed or a server(s) is not known.

Be sure the file name appears in one of these files:

```
/etc/pdlice/pdlice_key_S  
/etc/pdlice/pdlice_cfg_S  
/etc/pdlice/server_names
```

PDLICENSE_PUT_SEAT error

The license server was booting or otherwise not responsive. Possibly, another process, for example scavenger, kept the licensing files locked at that instant. The scavenging process should free the license shortly.

If you want to free the license sooner, type `pdlice -n` on the license server.

If you see this message while running `PD_SHELL`, exit `PD_SHELL` completely. If you do not exit and you execute another task, there will be two seats assigned to the same `PD_SHELL` process (new seat + old seat that is not released yet).

To free the license sooner using a Microsoft Windows computer, click **Scavenge for Keys** on the **Scavenge Options** dialog box.

Server Key File Mismatch (?) - Remove & Reinstall

The key files for the server are corrupt. You must reinstall the key. Any corrupt code appears in parentheses. Call Intergraph to receive help with the corrupt code. You can still run all the Windows Display Options commands.

SPLM Failed: [Read Pipe] Garbled Data From SPLM (Client)

The incorrect versions of software are installed. You must install the required versions of your product and SmartPlant License Manager. For example, you have installed PDS 8.0.1 and SmartPlant License Manager 8.0 client (or earlier version). You must install the latest version of SmartPlant License Manager.

SPLM Failed: Invalid Network Request - <license server>

The incorrect versions of software are installed. You must install the required versions of your product and SmartPlant License Manager. For example, you have installed PDS 8.0.1 and SmartPlant License Manager 8.0 server (or earlier version). You must install the latest version of SmartPlant License Manager.

SPLM Failed: SPLM Client must be updated to the latest version.

The SmartPlant License Manager client must be updated to SmartPlant License Manager version 08.00.02.00 or later.

SPLM Failed: This is an invalid client key.

Displays if a client node-independent key exists on a machine and a seat is requested using SmartPlant License Manager 08.00.02.00.

SmartPlant License Manager Warning: License expires with [days] - 20

This message appears each time a license is allocated beginning 45 days before expiration. The example warning message used here indicates the license will expire in 20 days. Notify Intergraph to set an installation date for a new license.

License Key Request Forms

Use the following forms for all software, including SmartPlant Instrumentation 7.0 and later. For INtools 6.0 and older, use the *INtools 6.0 (and older) License Key Request* form (page 66). The request forms are available on the following product Web pages. On the Web pages below, click **Learn More** and then **License Key Request Form**.

PDS 3D, PDS 2D, ISOGEN	http://ppm.intergraph.com/pds
FrameWorks Plus, SDNF Import	http://ppm.intergraph.com/structural
SmartPlant Electrical	http://ppm.intergraph.com/electrical
SmartPlant Instrumentation (formerly INtools)	http://ppm.intergraph.com/intools
SmartPlant Review	http://ppm.intergraph.com/visualization/sp_review.asp
SmartSketch	http://ppm.intergraph.com/smartsketch

Request for SmartPlant License Manager (SPLM) Key

Includes: PDS, PDS ISOGEN, FWP, SDNF Import, SupportModeler/Mgr, SmartPlant Review & Modules, SmartPlant P&ID, SmartSketch, SmartPlant Instrumentation, & SmartPlant Electrical

Email: ppmserv@intergraph.com Process, Power & Marine Fax: 256.730.3478

Provide the following for a single license server

Date:	Requestor:		Send Load Key to: (Fax &/or E-Mail)		
Customer Name	Lease Order Number	Lease PO Number	Site/LAN ID (see note)	Lease Begin Date	Lease End Date
SPLM License Server Name (can be TCP/IP Address)	"X" if new key required	Country for SPLM Server		Installation Date	
Machine ID for SPLM License Server					
Part Number List products used on SPLM Server	Month(s) Key Required Begin Month	Month(s) Key Required End Month	Order # (WA or OST)	Quantity	Maintenance (Yes or No)

This Document Should Be Treated as an Official Change Order to Your Purchase Order Referenced Above

Note: Plant Design Application Software must be loaded and run on the LAN for which it was purchased (Document last updated 31 October 2005)

INtools 6.0 (and older) License Key Request

Use the following process and forms to request license keys for INtools 6.0 and older. SmartPlant Instrumentation 7.0 (and later) uses the same request form as other products, not the one in this section.

1. If needed, request an INtools software upgrade from your local office.
2. Request the license file from Intergraph. The form is included in this section and available on the Web at <http://ppm.intergraph.com/intools>.

All other products use the License Key Request Forms on page 64.

Request for INtools License File



Email: ppmserv@intergraph.com

Process, Power & Marine (PPM)

Fax: 256.730.3478

For prompt and accurate licensing, please provide the data below. Your request cannot be processed until this form is complete. SmartPlant Instrumentation (formerly INtools) upgrade requests must be submitted to your local office prior to submitting license file request.

Name of the company that purchased the software:

End-User Site ID / LAN ID # :

Order Number (shown on Packing List ~ WA # no longer valid) :

New INtools End-user [Yes / No] :

End-user Name :

End-user Shipping Address :

End-user Phone Number :

End-user Email Address :

Requestor Name and Company :

Requestor Shipping Address :

Requestor Phone Number :

Requestor Email address :

Host Name / ID of Database Server :

INtools Part Number >

Number of Engineering licenses >

Number of Maintenance licenses >

INtools Version # >

Database Platform >

If WATCOM, a HASP (hardware lock/dongle) is required for each license. If you need a HASP, please select the required port. Parallel HASP [] -or- USB HASP []

If multiple database servers are going to be used to administer your INtools licenses, then the license distribution must be specified. If you have more than three Database Servers, please include the additional information below.

Host Name / ID of Second Database Server (optional):

INtools Part Number >

Number of Engineering Licenses >

Number of Maintenance Licenses>

INtools Version # >

Database Platform >

Host Name / ID of Third Database Server (optional) :

INtools Part Number >

Number of Engineering Licenses >

Number of Maintenance Licenses>

INtools Version # >

Database Platform >

Total Number of Licenses for Customer Site >**Check the INtools Add-On's purchased:**

[] INtools Maintenance Modules

[] INtools Application Programming Interface (API)

[] INtools Dimensional Data Piping (DDP) Module

[] INtools DCS Interface to Foxboro (\$0)

[] INtools Project Merger

[] INtools SAP Module

[] INtools Construction Module

[] INtools Telecom Module

Check the INtools Add-On leased :

[] Emerson DeltaV Catalog Manager

Notes :

INtools 6.0 (and older) Request Instructions

Name of the Company that purchased the software:

Intergraph Process, Power & Marine (PPM) records reference the name of the company or organization that actually purchased the INtools software. Providing the name of that company will avoid delays in the licensing process.

End-User Site ID / LAN ID #:

The customer Site/LAN ID is used to uniquely identify a specific site. Even companies that have a single site or location are assigned a Site/LAN ID. The PPM licensing process uses the Site/LAN ID to store and retrieve information about your license(s). Providing this ID will avoid delays in the licensing process and will help to ensure proper tracking of your license. This is important should you need to update your license file(s) in the future. If you do not know your Site/LAN ID, you may contact your local sales representative or reseller. The Site/LAN ID may also be found on your packing slip.

Requestor Shipping Address:

SmartPlant Instrumentation license files for Watcom database platform require a hardlock device. If the customer does not currently have a hardlock device, one will be mailed to the Requestor.

Requestor Phone Number:

Please provide in case there are questions regarding the license file.

Requestor Email address:

INtools license files are delivered via email to the Requestor. If you do not have access to email, please indicate this and you will be mailed a License Diskette.

Host Name / ID of Database Server:

Please list the Host Name or Host ID of the machine on which your database is installed.

Part Number >

Please list the Intergraph INtools, INtools Detailed Engineering, or INtools Basic Engineering part number that you purchased. You do not need to include the INtools Add-On's part numbers. INtools (SEBY453, 454, 470-473) licenses may not be mixed with INtools Basic Engineering (SEBY455) or INtools Detailed Engineering (SEBY457) on the same database server.

Number of licenses >

Please list the total number of licenses for this License Server. This includes both newly purchased licenses and previously purchased licenses that are currently on a valid maintenance contract.

INtools Version # >

Please list the full version number (i.e. 4.1c0407 or 04.02.03.07).

Database Platform >

Please list the database platform for this License Server. Valid database platforms are Oracle, MS SQL, or Watcom.

Total Number of Licenses for Customer Site >

Please list the total number of licenses that are being used at this customer site. This includes both newly purchased licenses and previously purchased licenses that are currently on a valid maintenance contract.

Check the INtools Add-On's purchased:

Please check any INtools Add-On's that you have either newly purchased or previously purchased that are currently on a valid maintenance contract.

Notes:

Any special handling instructions, clarification, or additional information may be included in the Notes field. If you own a customer-specific or Inactive INtools Add-on Module, please include this information.

Key-in Commands

Use the key-in commands to run SmartPlant License Manager in a Command Prompt window.

Alphabetical Commands List

Command	Alphabetical List Description
pdlice -a	Installs the SmartPlant License Manager server license key. For example, type pdlice -a 12AABBBCCCEDEFHKIPQRS. You must have administrative privileges to use this command.
pdlice -B	Displays the status of expired and unexpired license keys.
pdlice -c	Removes the current server license key. You must have administrative privileges to use this command.
pdlice -e	Generates an auditing code.
pdlice -f	Displays the current status of the license key.
pdlice -h	Displays this SmartPlant License Manager command list.
pdlice -I	Install and start the SmartPlant License Manager service.
pdlice -j	Adds servers and their addresses to the server_names file. For example, type pdlice -j server1 [12.34.56.78] server2 ... The address (shown in square brackets) is optional and applies to the preceding node name.
pdlice -k	Deletes servers from the server_names file. For example, type pdlice -k server1 server2 ...
pdlice -l	Displays the server_names file.
pdlice -m	Displays the current status of reserved licenses.
pdlice -M	Displays the current status of active PDS daily licenses.
pdlice -n	Scavenges for licenses.
pdlice -Q	Displays and allows you to modify the current license usage options. You must have administrative privileges to use this command.
pdlice -r	Reserves a license. For example,

Command	Alphabetical List Description
---------	-------------------------------

	<code>pdlice -r A B C server_name</code>
--	--

	where:
--	--------

	A = batch/interactive
--	-----------------------

	B = wait time (min
--	--------------------

	C = product tag
--	-----------------

	If no server names are supplied, SmartPlant License Manager searches the server_names file. The arguments are optional. -1 for the third argument allows for a default waiting time to be used. The default waiting time is currently 12 hours for batch jobs if all licenses have been taken.
--	--

<code>pdlice -R</code>	Stop and remove the SmartPlant License Manager service.
------------------------	---

<code>pdlice -u</code>	Unreserves a license. For example,
------------------------	------------------------------------

	<code>pdlice -u 33 server</code>
--	----------------------------------

--	--

	Seat number
--	-------------

<code>pdlice -?</code>	Displays the alphabetical SmartPlant License Manager command list.
------------------------	--

Functional Commands List

Functional List Description	Command
Auditing code.	pdlice -e
Command list for SmartPlant License Manager.	pdlice -?
Command list for SmartPlant License Manager.	pdlice -h
Install and start the SmartPlant License Manager service.	pdlice -I
License key status.	pdlice -f
Modify current license options. You must have administrative privileges to use this command.	pdlice -Q
Remove (and stop) the SmartPlant License Manager service.	pdlice -R
Reserve a license. For example, pdlice -r A B C server_name where: A = batch/interactive B = wait time (min C = product tag	pdlice -r
If no server names are supplied, SmartPlant License Manager searches the server_names file. The arguments are optional. - 1 for the third argument allows for a default waiting time to be used. The default waiting time is currently 12 hours for batch jobs if all licenses have been taken.	
Search for licenses.	pdlice -n
Server license key installation. Installs the SmartPlant License Manager server license key. For example, type pdlice -a 12AABBBCCCEDEFHKIPQRS. You must have administrative privileges to use this command.	pdlice -a
Server license key removal. Removes the current server license key. You must have administrative privileges to use this command.	pdlice -c
Server_names filename appears.	pdlice -l

Functional List Description	Command
Servers and addresses added to the server_names file. For example, type <code>pdlice -j server1 [12.34.56.78] server2 ...</code> . The address (shown in square brackets) is optional and applies to the preceding node name. If server1, for example, belongs to a different LAN, SmartPlant License Manager may not be able to locate its address. In this case, type the address without the brackets.	<code>pdlice -j</code>
Servers: Delete servers from the server_names file. For example, type <code>pdlice -k server1 server2 ...</code>	<code>pdlice -k</code>
Status of active PDS daily licenses.	<code>pdlice -M</code>
Status of all license keys (expired and unexpired).	<code>pdlice -B</code>
Status of reserved licenses.	<code>pdlice -m</code>
Unreserves a license. For example, <code>pdlice -u 33 server</code> Seat number	<code>pdlice -u</code>

Appendix A

Using the SmartPlant License Checkout Utility with SmartPlant Review

The SmartPlant License Checkout utility (License Checkout Utility.exe) allows you to obtain licenses for SmartPlant Review and its modules for use on a non-networked computer (laptop). Using this utility allows you to run SmartPlant products without a network connection to the license server. The key becomes a portable key and the client machine does not require a fixed TCP/IP address.

When you check out a license, the license and expiration information are stored in the local SmartPlant product executable. Each time you start the product during the checkout period, a message displays the expiration date for the checked out licenses.

When the checkout period for the license expires, the product returns to the concurrent licensing mode. For example, after the license expires at 11:59PM on the expiration date, the next time you start the product, it attempts to access the licensing server for base and module licenses prior to running.

Notes

- You must install and configure SmartPlant License Manager before checking out a license.
- If you are using an evaluation license, you cannot check out licenses.
- The user must be a part of the Administrator's group in order to check out a license.
- To install this utility, select the **Prerequisite Software** link on the SmartPlant Review product CD and select **License Checkout Utility**. The utility is installed in C:\Program Files\SmartPlant\License Checkout Utility\Program by default and is available on the **Start** menu under **Programs > Intergraph SmartPlant License Checkout Utility > License Checkout Utility**.

Install SmartPlant License Checkout Utility

1. Insert the SmartPlant Review product CD into the CD-ROM drive. If the installation does not start automatically, double-click **setup.exe** in the main folder.
2. Click Prerequisite Software.
3. Click License Checkout Utility.
4. Type your name and company name.
5. Verify your name and company name, and then click **Yes**.
6. Click **Display** to read and accept the license agreement, then click **Yes**.



Note

- You must have Adobe Reader 4.0 or higher to view the license agreement. Adobe Reader 7.0 is available on the product CD.
7. Specify the destination folder.
 8. Review your settings, and then click **Next** to install the SmartPlant License Checkout utility.
 9. Click **Finish**.



Notes

- You can uninstall the License Checkout utility at any time, even if you are currently running a product in remote license mode.
- You cannot uninstall or reinstall SmartPlant Review modules while you are running in Checkout mode.

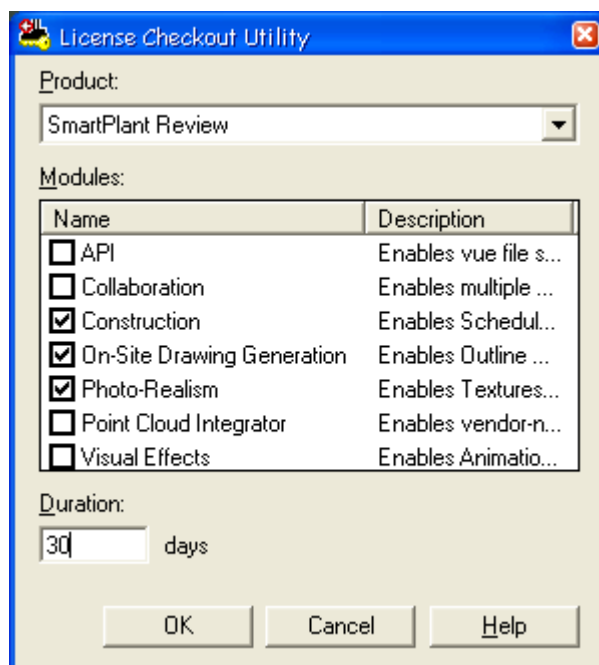
License Checkout Utility Dialog Box

The SmartPlant Review Select Modules Utility, installed by default during SmartPlant Review setup, allows you to specify which modules you want to pull licenses for when starting a SmartPlant Review session. Once you check out a license, you need to wait until the check out period is expired before you can add other modules or make any modifications.

Product - Displays the installed products available for license checkout. Select the product for which you want to check out licenses.

Modules - Displays the modules available with the selected product. A grayed-out entry means that module is not installed on your workstation. Check the box beside the module for which you want to check out a license. If you want to check out only the base product, do not check any of the modules.

Duration - Specify the number of days for which you want to check out a license for the selected modules. The maximum duration is 30 days.



Note

- Checked out licenses cannot be checked in. You cannot add additional modules until the licenses expire.

Check Out a License

1. Be sure that SmartPlant License Manager is installed and configured on your computer.
2. Click **Start > Programs > Intergraph SmartPlant License Checkout Utility > License Checkout Utility**.
3. Select the module for which you want to check out a license.

Notes

If you want to check out only the base product, do not check any of the modules.

If you are using an evaluation license, you cannot check out licenses.

If you are already running in remote license mode, the software displays a message stating which product and modules are checked out and when their licenses expire.

4. Click **OK**.

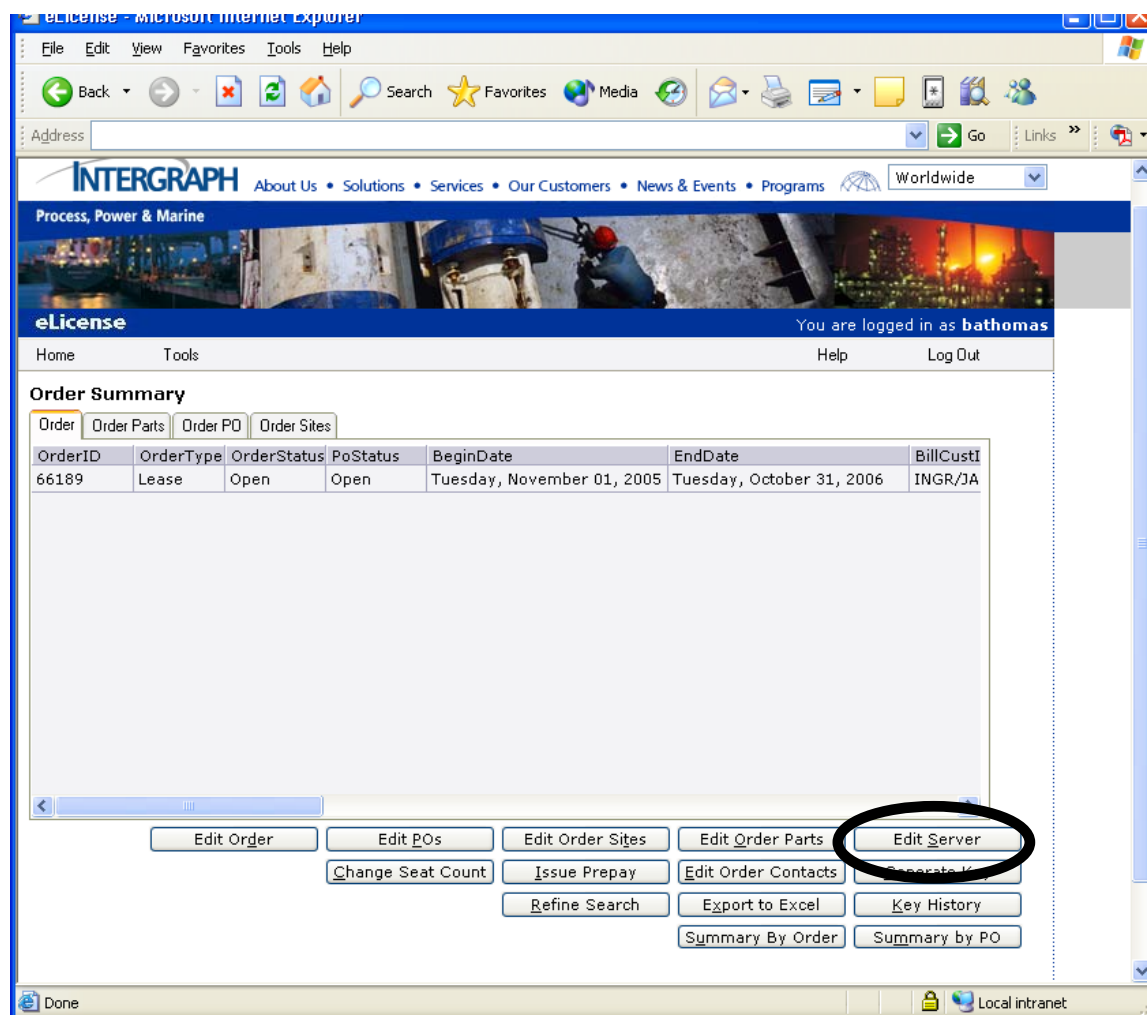
 Notes

- Checked out licenses cannot be checked in.
- When running in Checkout license mode, you cannot use setup to modify the product installation until the checkout duration expires and the system is working with SmartPlant License Manager in connected license mode once again. In other words, you cannot install or remove modules while running in remote license mode.
- If SmartPlant Review is running in Checkout license mode but is unable for any reason to obtain a license, SmartPlant Review automatically returns to concurrent license mode and attempts to obtain the licenses from SmartPlant License Manager server. SmartPlant Review notifies you if it is unable to obtain licenses from SmartPlant License Manager.
- Each time you start SmartPlant Review while using Checkout license mode, the software displays a message informing you when the checked out licenses will expire. The first time you run SmartPlant Review after the checked out licenses expire, the software displays a message informing you that the checked out licenses have expired and that the software is reverting to the concurrent license mode and attempting to get licenses from SmartPlant License Manager.

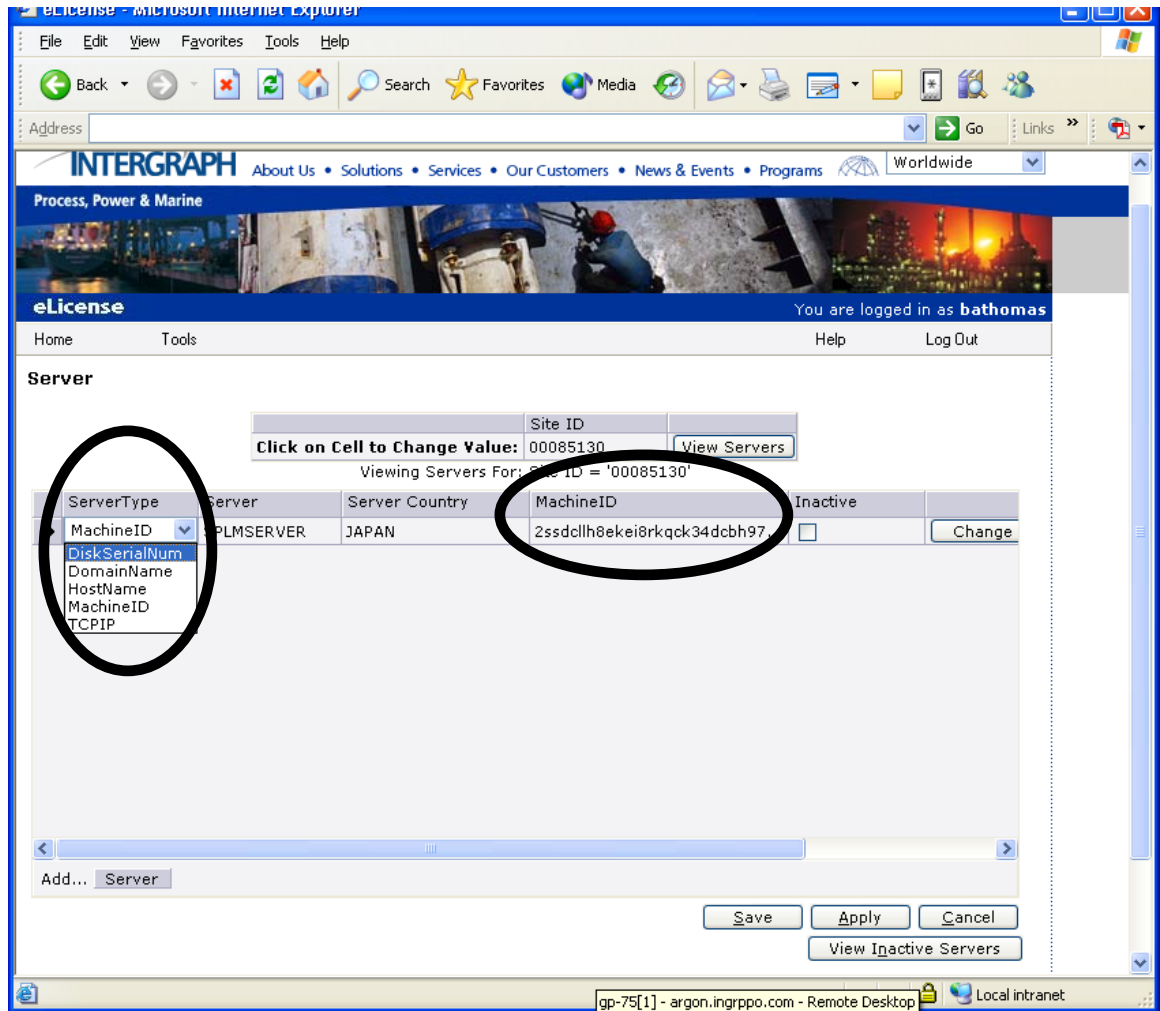
Using eLicense to Generate SmartPlant License Manager Keys

Customers using eLicense to manage their licenses receive them immediately by e-mail.

1. Log into eLicense (<https://ppmapps.intergraph.com/ELICENSE/>).
2. Select your lease (**OrderID**) using the search option. You may apply filters to your search to select the lease.
3. Click the **Show Results** button.
4. You are now on the **Order Summary** screen. Click the **Edit Server** button.



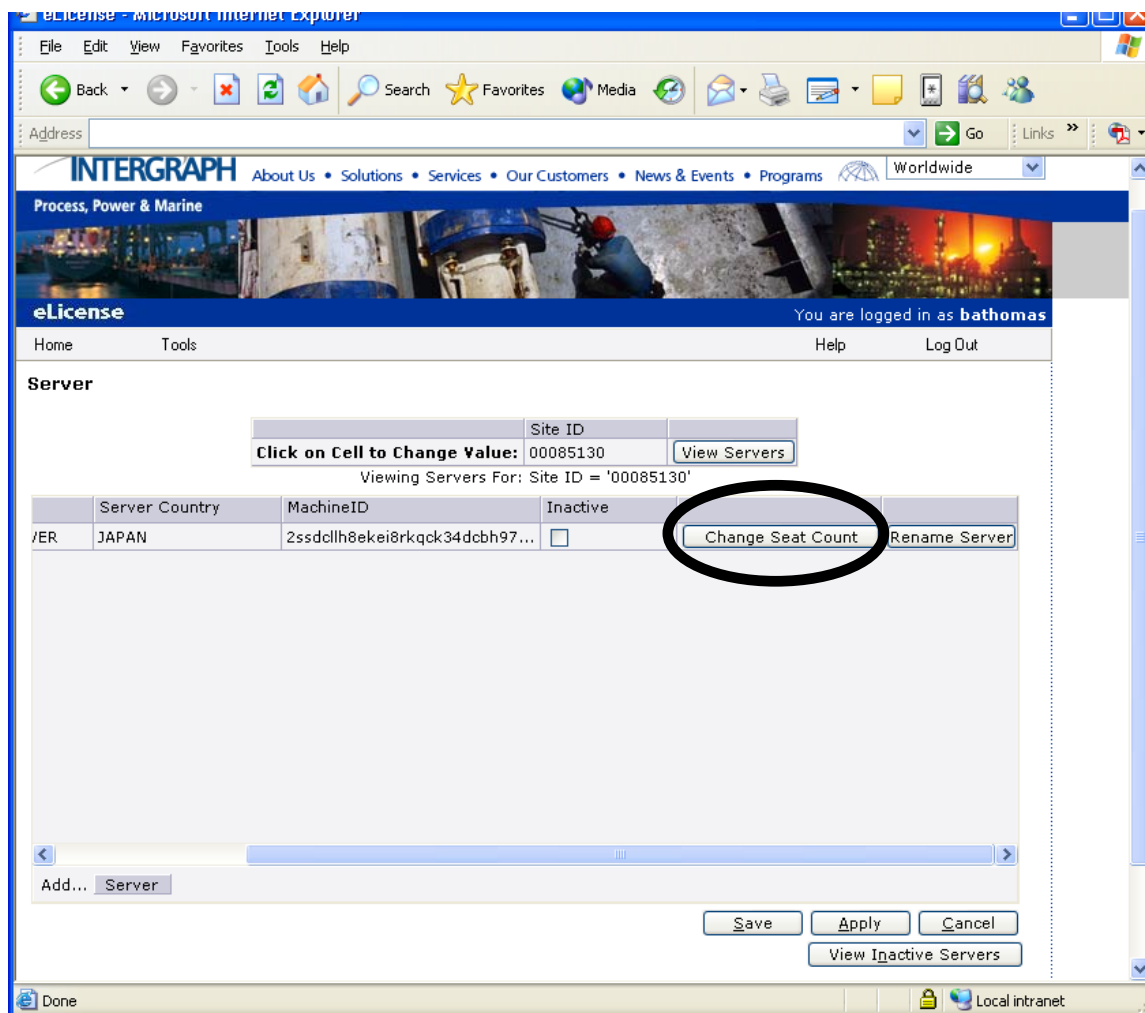
5. The **Server** screen displays. In the **Server Type** column, select the drop-down list and select **MachineID**. To generate SmartPlant License Manager keys, you must select **MachineID**.
6. Copy the Machine ID from the email and paste it into the **MachineID** column on the **Server** screen.



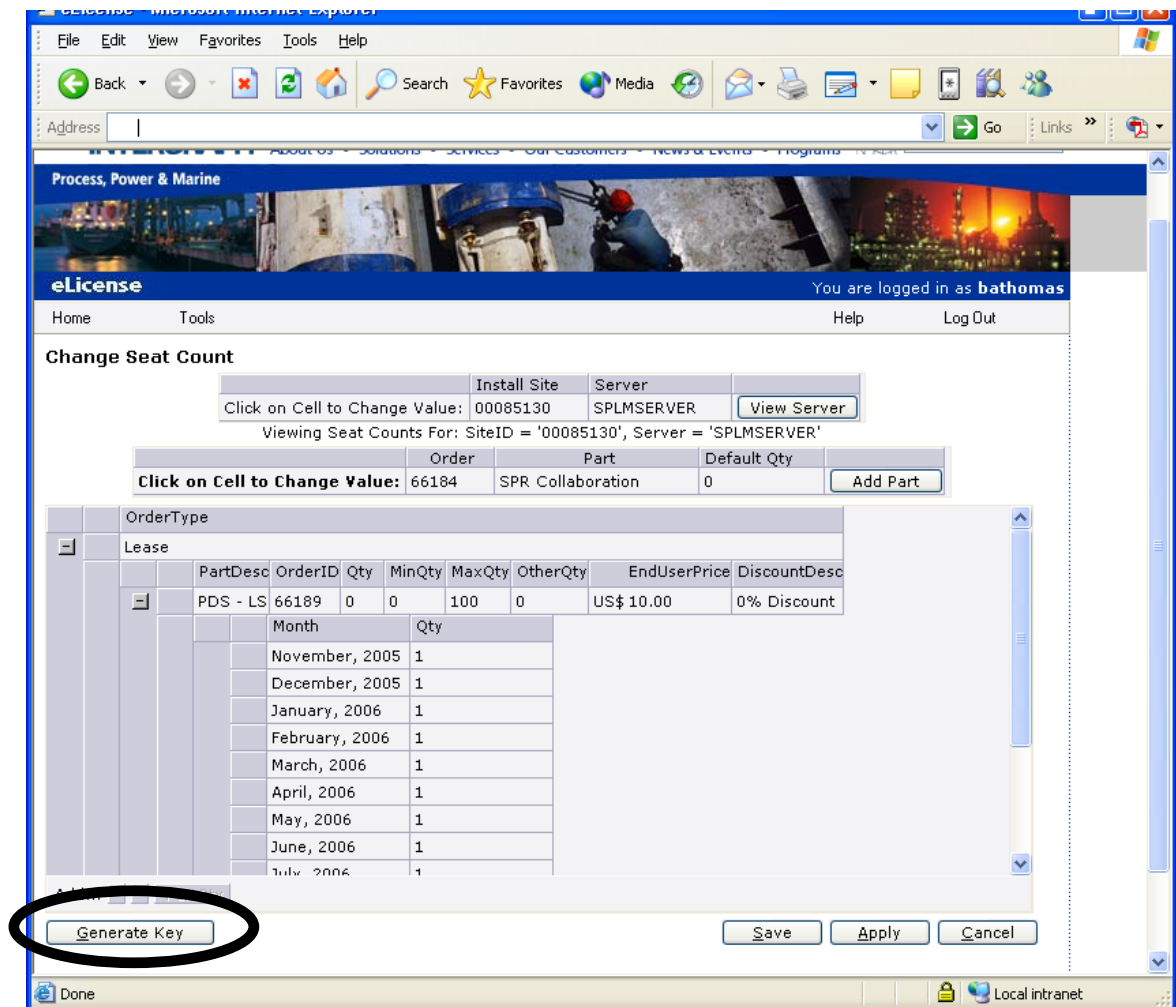
The ServerType determines the key that will be generated. The product determines which ServerType is selected.

- DiskSerialNbr = SPF
- DomainName = XPDA
- Machine ID = SPLM keys
- TCPIP = PD_LICE Keys
- HostName = SPF, Marian, INtools 6.0 or earlier

- Using the scroll bar at the bottom of the **Server** screen, scroll to the right to show the **Change Seat Count** button.

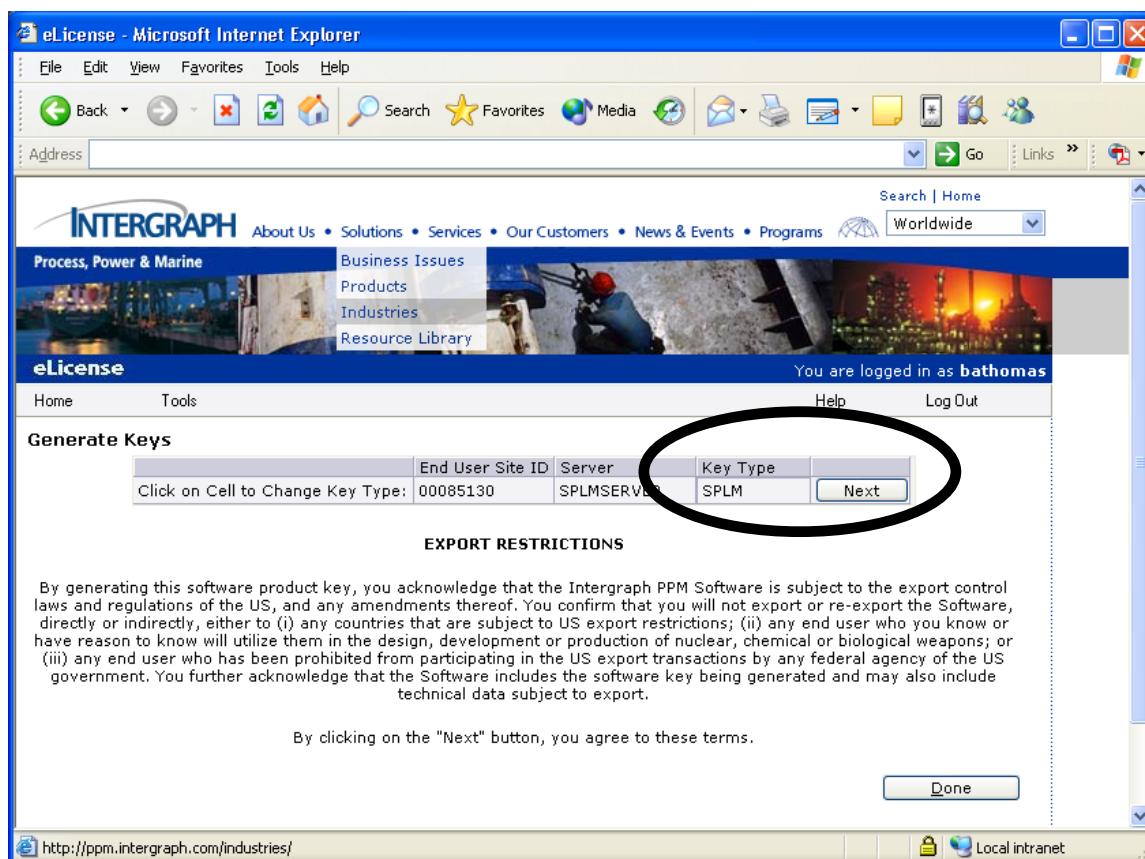


8. You are now ready to generate the SmartPlant License Manager key. Click the **Generate Key** button.

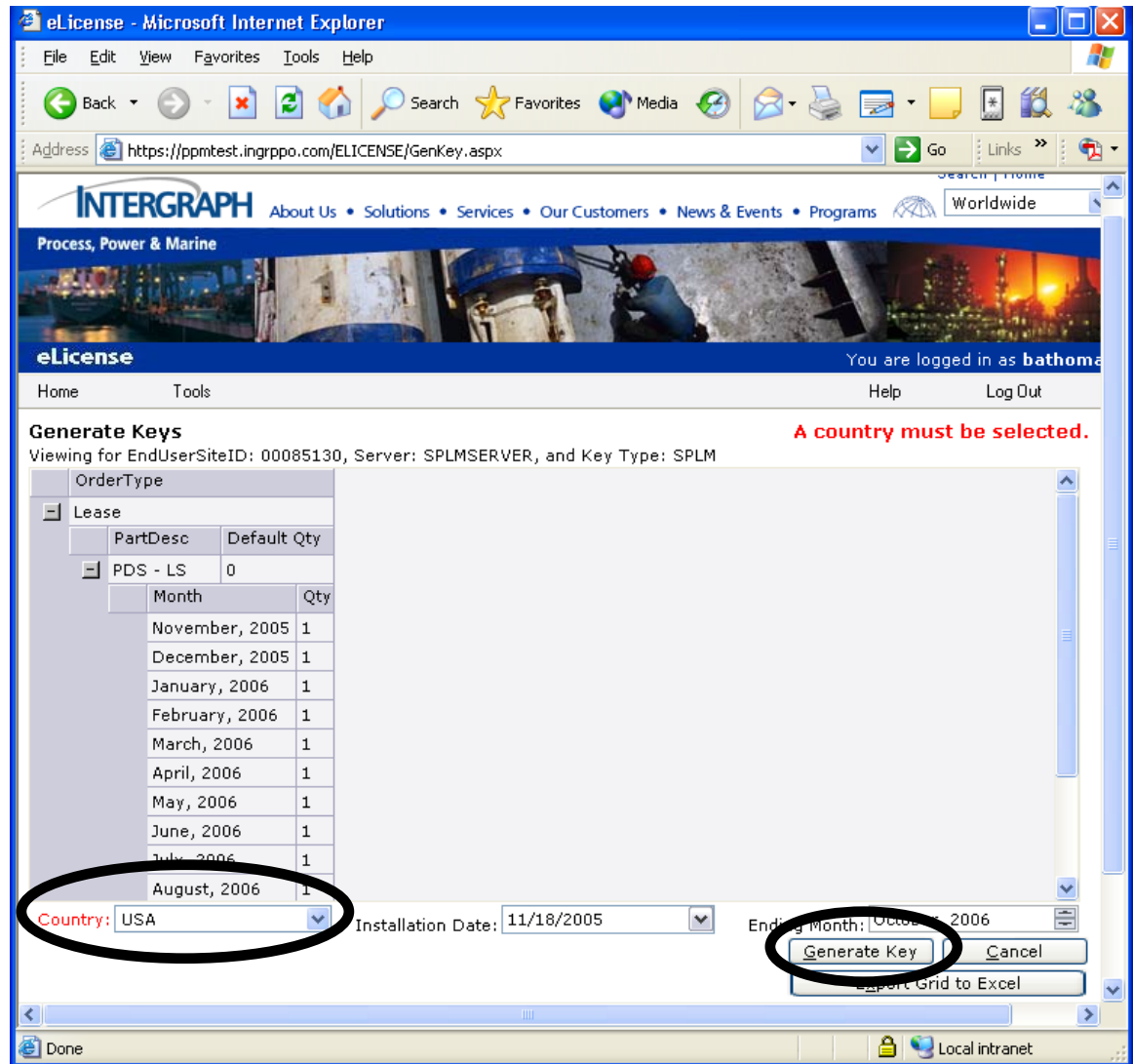


9. On the **Generate Keys** screen, select **SPLM** in the **Key Type** column.

10. If the export restrictions are accepted, click **Next**.



11. Select your country from the **Country** drop-down list.
12. Click the **Key Generate** button. The key has now been generated.



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